







F 85d C. Z. CRLSSI

SMITHSONIAN INSTITUTION FREER GALLERY OF ART

ORIENTAL STUDIES, NO. 3

A DESCRIPTIVE AND ILLUSTRATIVE CATALOGUE

OF

CHINESE BRONZES

ACQUIRED DURING THE ADMINISTRATION OF JOHN ELLERTON LODGE

(WITH 50 PLATES)

COMPILED BY
THE STAFF OF THE FREER GALLERY OF ART



(Publication 3805)

WASHINGTON 1946



The Lord Galtimore (Press. BALTIMORE, MD., U. S. A.



PREFACE

For the first 22 years of its existence, 1920–1942, the Freer Gallery of Art was under the wise and able direction of the late John Ellerton Lodge. During this period Mr. Lodge added to the original Freer collection many works of major importance in the fields of Chinese bronzes, paintings, jades, sculpture, and ceramics; Indian paintings, sculptures; Arabic, Persian, and Armenian manuscripts and paintings; Syrian and Persian glass, pottery, and metalwork.

A gifted linguist with the highest standards of scholarship, Mr. Lodge carried on no small amount of research work during the years at the Freer Gallery. He recognized the uncertain ground upon which many of the current ideas of things Chinese were based; therefore he published nothing, feeling that his first task was to build a significant collection in every department in accordance with terms of the foundation. On the other hand he was ever generous to those who wished to use Freer Gallery material in their publications, giving freely of the results of his own research work. He often used to say, "The Freer Gallery is my publication," and, indeed, the impeccable standard set by him, and the quality of the acquisitions, more than justified this view. The standard thus set was predicated on the ground that for inclusion in the collection, a given object, within its kind, must be of the highest quality in both conception and execution. The objects acquired as a result of this unwavering standard form a monument to the wisdom of this procedure. Now, however, it seems fitting that some of the results of this work be published by continuing the *Oriental Studies* series begun under our late Director's administration. This volume contains reproductions of 56 Chinese bronzes from among those acquired by Mr. Lodge, together with such comments and studies as he made for the Freer Gallery records. These records, it will be noted, are initialed and dated, and since certain of them are of some years' standing and had not been revised in the light of more recent discoveries and researches, additional notes have been added as we know Mr. Lodge would have wished.

In the preparation of this book we have been deeply indebted to all members of our staff, particularly to Miss Grace Dunham Guest, Assistant Director, for her help and many wise suggestions; to Miss M. Eleanor Morsell, Illustrator, for all the drawings appearing in the text except those on pages 63 and 68, which were done by Benson Moore; and to Burns A. Stubbs, Assistant to the Director, whose outstanding photographic work has made possible the fine quality of the reproductions. John A. Pope, Associate in Research, has collaborated with the writer in all phases of research and preparation of this book which we hope may be a fitting memorial to John Ellerton Lodge.

A. G. WENLEY.

Freer Gallery of Art, October 1944.

¹ J. E. L.—John Ellerton Lodge; A. G. W.—A. G. Wenley; J. A. P.—J. A. Pope,



CONTENTS

ŀ	'age
roduction	1
ronology	11
oliography	13
et of Plates	19
onzes Listed in Numerical Order	20
talogue	23
dev	101



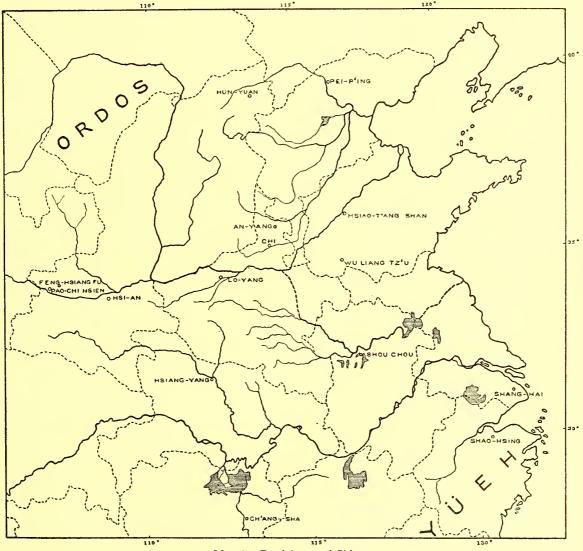




John Ellerton Lodge, 1878-1942

INTRODUCTION

Since the excavations at An-yang in 1929 practically the whole of our ideas about the dating of early Chinese bronzes has changed. Furthermore, a whole new Chinese literature has sprung up which relates not only to excavations but also to epigraphy, ranging from that on the Shang oracle bones down through the Chou



MAP 1.—Partial map of China.

dynasty bronzes. Attempts have also been made to collate the historical events described on bronze inscriptions, and from these in some cases accurate dating may be had. In addition to these, there have been stylistic studies, notably those by Karlgren (27; 29) and later by Jung Kêng (21). Despite these and their frequently

attractive and plausible theories, we still lack the factual knowledge that it is to be hoped will be forthcoming in post-war archeological researches. The actual historical dates and sequences before 841 B.C. are open to question, although it is interesting to note that Wu Ch'i-ch'ang's application of the San t'ung li calendar (87) to the Chou dynasty meets Tung Tso-pin's work on the Shang calendar (69), tending to verify 1122 B.C. as the beginning of the Chou dynasty. Still, plausible as these calendar theories are, they again are not yet proven. In view of the above we have not sought to divide the bronzes of the early periods minutely but have contented ourselves with the designations Shang, Chou, and late Chou, while as a matter of convenience the traditional chronology has been used.

The technique of early bronze casting has been treated elsewhere, notably by W. Percival Yetts (92), Orvar Karlbeck (24) and Jung Kêng (21). Suffice it to say here that we know now that piece molds keyed together with mortise and tenon were used, that it is quite possible that this technique was used both in direct casting and in combination with the cire perdu process. If the latter combination was used, it seems possible that the *cire perdu* process by itself may also have existed. In addition to these studies it may be observed that even fairly early bronze vessels were not always cast in one piece. That is to say that in a number of cases it is quite evident that functional and ornamental protuberances, such as handles, knobs, etc., have been cast separately and then attached to the vessel by some process of brazing. This also seems evident in the attachment of bail handles where the rings terminating the handles have been made in two halves, the lower half being thrust through the ring on the side of the vessel and then brazed to the upper half on the end of the handle. Among examples of this technique are the handles of two bronzes of the type kuei, 31.10 and 38.20, as well as the bail rings, cover knob, and four hooklike projections on a bronze yu, 30.26, all of which have been attached by brazing.

In regard to the names of types of vessels, we have adhered to the traditional names based in general upon Jung Kêng's classification with few exceptions. For convenient reference the following list of types, including weapons, occurring in this volume is given.

Ch'i 鍼: A kind of battle-axe.

Chia 學: A round tripod, or square, four-legged vessel with handle on one side or at the back; with two uprights on lip; with or without cover.

Chien 鑑 (or sometimes hsi 洗): A large, deep basin, perhaps used for reflecting as the name chien implies, or for washing as the alternate name hsi implies.

Chien 劍: A two-edged sword.

Chih 解: A small wine jar ovoid in section, usually covered.

Chung 鐘: A large clapperless bell to be sounded by striking from the outside; ovoid in section, with handle on top.

Chüeh 爵: A tripod wine cup with a troughlike spout; projecting lip behind; handle at one side, and two uprights on the lip.

Huo 盉: A covered wine vessel with spout for pouring, and handle; usually with three or four legs.

I 彝: A general term for sacral vessels often qualified by a descriptive adjective such as fang 方 "square." See No. 30.54.

Ko 戈: A dagger-axe; a halberd.

Ku 觚: A slender beaker with wide foot and flaring lip.

Kuang 就: A squat wine pitcher elongated from front to back; with cover extending over open spout; zoomorphic in form.

Kuei 為: A food vessel in the form of a bowl with two to four handles, or without handles, supported on three or four feet, a hollow rectangular base, or on its own round foot; with or without a cover.

Lei 罍: A vase with a large body.

Tao Л: A knife.

Tou 豆: A stemmed food vessel with spheroid bowl and cover; two annular handles, circular projection on cover to serve as a handle for lifting the cover, or as a foot when the cover is inverted.

Tsun 尊: Generally a large jar or vase for wine with a flaring lip and round or rectangular in shape, or certain otherwise unclassified zoomorphic vessels.

Tui 軟: This term was formerly applied to vessels now classed as kuei (cf. notes on 32.13). Jung Kêng still uses this classification as distinct from the kuei. According to his definition the tui is a vessel with three feet and two handles, the top and bottom forming halves of a sphere so that the whole is spherical in shape. It also occurs without handles, or with four handles. It may be egg-shaped, and it may be without feet (21, vol. 1, p. 365).

Yu 卣: A covered wine jar ovoid or round in section, with a bail handle.

Yü 孟: A large, deep vessel with flaring lip; with or without handles. For wine or water.

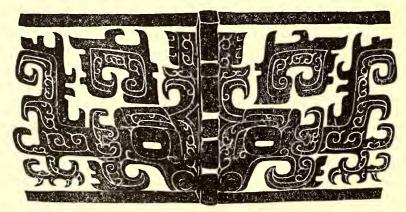
The designs with which the ancient Chinese bronzes are adorned seem at first glance innumerable. Actually most of them are great or small variations or combinations of the same elements. In his able chapter on the subject, Jung Kêng (21) has separated these designs into 77 named types of which as many as 32 seem to have had their rise in the Shang dynasty. However, it is noteworthy that among these again many are really variations of the same basic designs, and if one attempts to differentiate too much there is the possible danger of confusing differences resulting from personal and geographical factors with those of the time element. It is well known by simple observation that wide differences in decorative style occur in the same period. One example treated in this book is to be seen in Nos. 30.54 and 33.2 which may be only a year apart in time. That this should be so is perfectly natural, just as it is perfectly natural that there is a wide divergence in quality of bronzes of the same period. This is not to say that the question of decoration is not important. On the contrary, the work done in this field, particularly by Karlgren and Jung Kêng, is most important and contains, no doubt, much of the truth. Our present knowledge of the subject, however, is still inconclusive, for the bulk of our scientific archeological work is still to be done.

The designs, including the so-called *t'ao-t'ieh* 饕餮 masks, are mostly zoomorphic in form and no doubt partly symbolic of the animistic religion of the time.

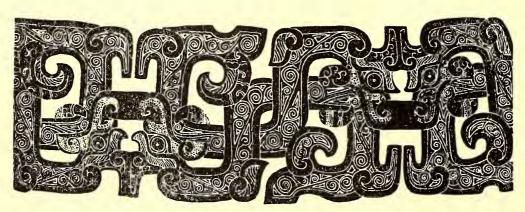


SECOLULAR DE LA COMPANION DE L

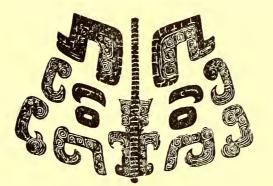
38.6



30.54



39.5

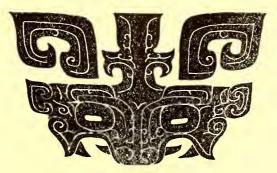








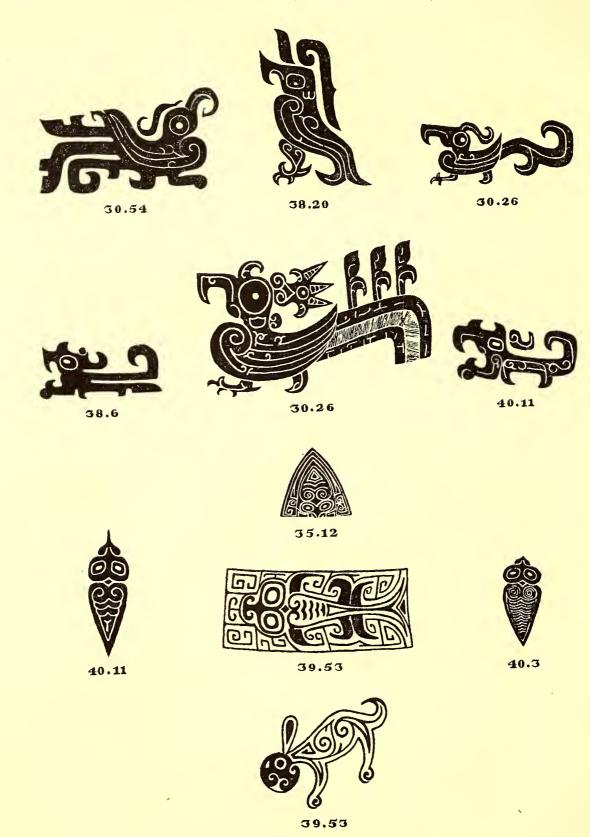




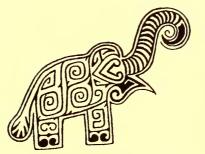
38.20



30.54



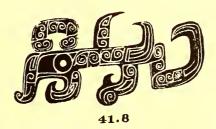






39.53

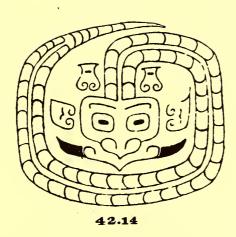


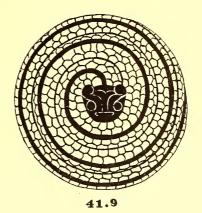












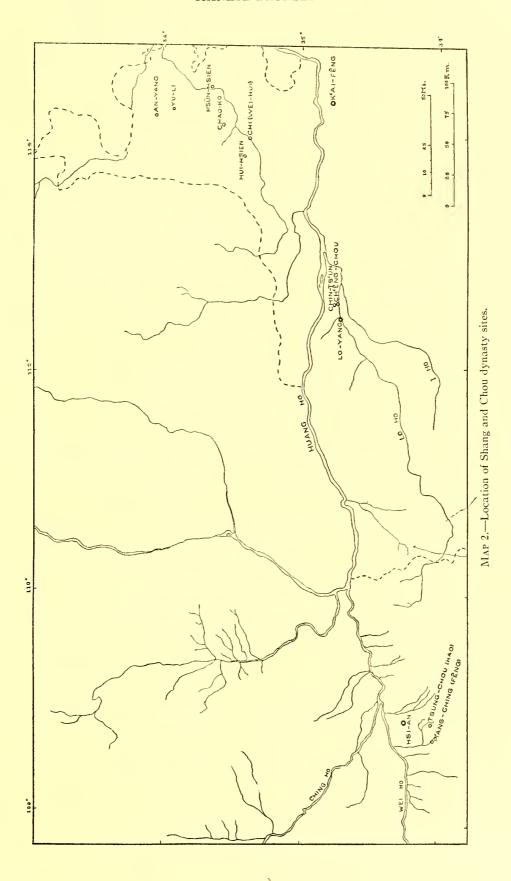
Just what animals, birds, etc., are represented is often a moot point. We seem to find the tiger, water buffalo, elephant, hare, deer, owl, parrot, et al. Also we find fish, the cicada, and perhaps the silkworm. These animal patterns vary from quite natural representations to extremely formal ones, and most are ingeniously contrived to fit the shape of the vessel or the part of the vessel on which they are shown. Usually they have every air of perfect symmetry, but when observed closely, or taken from their context, as in the accompanying drawings, they are often to some extent asymmetrical. Many are composite beasts, and it may well be that the whole theory behind them was at least as complicated as, say, the science of heraldry. Mr. Lodge found them "zoologically beguiling," which indeed they are, and they show well the inherent humor of the Chinese people which survives to this day. Aside from these, there are, of course, the geometrical designs like the so-called thunder pattern, circles, lozenges, and many more, which may have their bearing on the subject to a greater or less degree. Still, we lack the key to this particularly intricate problem.

The line drawings given here are taken from bronzes illustrated in this volume to show just a few basic designs, and in some cases how their concepts overlap. Each drawing bears the number of the vessel from which it was taken.

Studies of the composition of ancient Chinese bronze have been made by a number of scholars, Chinese, Japanese, and Western. Among these, one of the most interesting is that of H. J. Plenderleith (53). His findings show that the ancient bronzes analyzed by him are copper-tin alloys containing from 5 percent or less to 30 percent tin and usually from 2 to 3 percent lead, or more. In other words, the copper-tin content has about the same range of composition as our bronzes of today. In addition to this, traces of silver, antimony, magnesium, calcium, and sodium were found in a Shang bronze fragment. Also, specimens of these alloys are harder as the proportion of tin increases and at the same time become more and more silvery in appearance. It may be noted here that in the writer's experience the majority of early Shang-Chou bronzes of the very best quality take on a gray to green patination underlying which will be found a pale gold-colored metal. This does not, however, preclude the possibility of excellent vessels of different composition. For example, the bronze *chia No.* 23.1, has dark green patina over a generally silver-colored bronze, as a filing of the broken foot shows, indicating, perhaps, a greater proportion of tin than that in most of the other early vessels treated here. However, it is also noteworthy that, fine as this vessel is, the quality of casting in the design is not uniform over all as it is in the very best bronzes. However, the series of bronze analyses made up to this time is much too small for any definite conclusions.

From the above remarks it will be seen that this book makes no attempt either to advance or to prove any theories in regard to Chinese bronzes. Rather it is an attempt to tell something of what is at present known about individual pieces. It brings together the greater part of the Chinese bronzes, dating from the Shang dynasty to the fourth century of our era, acquired for the Freer Gallery of Art during the administration of its first Director.

A. G. W.





CHRONOLOGY

Hsia 夏		?—ca.	1766 B.C.
Shang 商 (also called Yin 殷)ca.	1766	B.C.—ca.	1122 B.C.
Chou 周ca.	1122	В.С.—	256 B.C.
Western Chou1122—771			
Eastern Chou			
After 256 the state of Ch'in effectively con-			
trolled most of China; its ruler took the			
title of "Emperor" in 221.			
Ch'in 秦	221	B.C.—	207 B.C.
Former (Western) Han 前 (西) 漢	207	B.C.—	A.D. 8
Hsin 新 (interregnum of Wang Mang 王 莽 and revolution	ı) A.E). 9—	25
Later (Eastern) Han 後 (東) 漢		25—	220
The Three Kingdoms 三國		220—	265
Wei 魏220—265 North China			
Shu Han 蜀漢221—264 Southwest China			
Wu 吳222—265(280) Southeast Chir			
Western Chin 西 晉		265	316
Eastern Chin 東 晉		317—	420
Six Dynasties 六朝 (includes Wu and Eastern Chin)		220	589
Sui 隋		589—	618
T'ang 唐		618—	906
The Five Dynasties 五代		906—	960
Northern Sung 北宋		960—	1127
Southern Sung 南 宋		1127—	1279
Yüan 元		1260—	1368
Ming 明		1368	1644
Ch'ing 清		1644	1912
Republic of China 中華民國		1912	



BIBLIOGRAPHY

The following list includes only those works to which reference is made in the text by quoting the bold-face numeral appearing before each title. Many of the books, catalogues, and articles in which one or more of the bronzes have been published are not included. The following abbreviations are used:

BGSC —Bulletin of the Geological Survey of China, Peking.

BMFEA—Bulletin of the Museum of Far Eastern Antiquities, Stockholm.

CJSA —The China Journal of Science and Arts, Shanghai.

KHCK —Kuo hsüeh chi k'an (Gwoshyue jikhan) 國 學 季 刊, A Journal of Sinological Studies, Peiping.

OZ —Ostasiatische Zeitschrift, Berlin.

RAA —Revue des Arts Asiatiques, Paris.

SG — Shinagaku 支 那 學 (Sinology), Kyōto.

SZ — Shigakuzasshi 史學錄誌 (Zeitschrift fur Geschichtswissenschaft), Tōkyō.

TOCS —Transactions of the Oriental Ceramic Society, London.

TP —T'oung Pao, Leiden.

YCHP —Yen ching hsüeh pao 燕京學報, Yenching Journal of Chinese Studies, Peiping.

Academia Sinica.

1. An-yang fa chüeh pao kao 安陽發掘報告. Preliminary reports on excavations at Anyang. Pts. 1-4. Peiping, 1929-33.

Andersson, J. G.

- 2. An early Chinese culture. In BGSC No. 5, pt. 1 (Oct. 1923), 1-68, 17 pls.
- 3. Hunting magic in the animal style. In BMFEA No. 4 (1932), 221-316, 36 pls.
- 4. Selected Ordos bronzes. In BMFEA No. 5 (1933), 143-154, 16 pls.

ARDENNE DE TIZAC, J. H. D'.

5. L'art chinois classique. Paris, 1926.

Biot, É.

6. Le Tcheou-li. 2 vols. Paris, 1851.

Brankston, A. D.

- 7. Chinese bronze mirrors from the district of Yüeh. In TOCS No. 17 (1939-40), 56-64, 2 pls. Burnet, H. K.
 - 8. Catalogue of the fine collection of important early Chinese bronzes, rare archaic jades, paintings, lacquer, textiles, rugs, sculpture, Chinese ceramics and various works of art. London, Sotheby & Co., 1941.

CHAVANNES, É.

- 9. Les mémoires historiques de Se-ma Ts'ien. 5 vols. Paris, 1895-1905.
- 10. Mission archéologique dans la Chine septentrionale. 1 vol. in 2 pts., 488 pls. in 2 portfolios. Paris, 1909–15.

CH'IEN TIEN 錢 坫.

11. Huan hua pai shih hsüan ching ming chi lu 浣花拜石軒鏡銘集雜. Mirrors and their inscriptions in the author's collection. In Pai i lu chin shih ts'ung shu百一盧金石叢書, pên 5. 10 pên, n. p., 1921.

12. Chou li 周 禮. The Administrative and Ritual Code of the Chou dynasty; probably constituted about the fourth century B. C. Commentaries by Chêng Hsüan 鄭 玄 (A. D. 127-200) and Chia Kung-yen 賈 公 彥 (seventh century). 6 pên, n. d.

CREEL, H. G.

13. The birth of China. London, 1936.

Fêng Yün-p'êng 馮雲鵬 AND Fêng Yün-yüan 馮雲鷄.

14. Chin shih so 金 石 索. Illustrated treatise on inscribed bronzes and stones. Two sections, Chin so and Shih so, of 6 pên each. 1823.

Gotō Moriichi 後藤守一.

15. Kanshiki kyō 漠 式 鏡. Tōkyō, 1926.

HALL A. R.

16. The Wu ti mirrors. In OZ n. f. 10 (1934), 16-23, 1 pl.

HARVARD-YENCHING INSTITUTE.

17. Mao shin yin tê 毛 詩 引 得. A Concordance to Shih ching. (Harvard-Yenching Institute, Sinological index series, Supplement No. 9.) Peiping, 1934.

Janse, O.

- 18. Le style du Houai et ses affinités. In RAA No. 8 (1934?), 159-180.
- 19. Quelques antiquités chinoises d'un charactère hallstattien. In BMFEA No. 2 (1930), 177-183.

Jung Kêng 容 庚.

- 20. Chin wên pien 金 文 編. Inscriptions on bronzes. 2d ed. rev. and enl. 5 pên. Ch'ang-sha, 1939.
- 21. Shang chou i ch'i t'ung k'ao 商 周 彝 器 通 考. The bronzes of Shang and Chou. 2 vols. Peiping, 1941.

KANO JIHEI 嘉納治兵.

22. Hakkaku kikkin shū 白鶴吉金集. Kano collection of bronzes with notes by Umehara Sueji 梅原末治. Sumiyoshi, 1934.

Karlbeck, O

- 23. Notes on some early Chinese bronze mirrors. In CJSA vol. 4 (Jan.-June 1926), 3-9, 4 pls.
- 24. Anyang moulds. In BMFEA No. 7 (1935), 39-60, 7 pls.

KARLGREN. B.

- 25. Early Chinese mirror inscriptions. In BMFEA No. 6, (1934), 9-79.
- 26. Huai and Han. In BMFEA No. 13 (1941), 1-125, 80 pls.
- 27. New studies on Chinese bronzes. In BMFEA No. 9 (1937), 1-117, 64 pls.
- 28. Notes on a Kin-ts'un album. In BMFEA No. 10 (1938), 65-81, 6 pls.
- 29. Yin and Chou in Chinese bronzes. In BMFEA No. 8 (1936), 9-154, 58 pls. Also published in Yin and Chou researches. Stockholm, 1935.

Kümmel, O.

30. Jörg Trubner: zum Gedächtnis. Berlin, 1930.

Kuo Mo-jo 郭 沬 若.

- 31. Ku tai ming k'o hui k'ao hsü pien 古代銘刻彙攷續編. Tōkyō, 1934.
- 32. Liang chou chin wên tz'ǔ ta hsi k'ao shih 兩 周 金 文 辭 大 系 考 釋. Studies on inscriptions on Chou dynasty bronzes. Rev. ed. 3 pên. Tōkyō, 1935.
- 33. Yin chou ch'ing t'ung ch'i ming wên yen chiu 股 周 青 銅 器 名 文 研 究. Studies of inscriptions on bronzes of the Yin and Chou dynasties. 2 pên. Peiping, etc., 1931.

Kuo Ting-t'ang 郭 鼎 堂.

34. Ch'ên ch'ên huo k'ao ming shih 臣 辰 盉 考 名 釋. Study of the inscription on the Ch'ên ch'ên huo. In YCHP vol. 9 (1931), 1739-1744.

LEGGE, J.

- 35. The Chinese classics. 5 vols. in 8 vols. Vols. 3-5, Hongkong, 1865-72. Vols. 1-2 rev., Oxford, 1893-95.
- 36. The Lî kî (Sacred books of the East, XXVII-XXVIII). 2 vols. Oxford, 1885.

LIANG SHANG-CH'UN 梁上椿.

37. Yen ku ts'ang ching 巖窟藏鏡. Illustrated catalogue of mirrors in the author's collection. 3 pên. Peiping, 1941.

LIANG SHIH-CHÊNG and Others 梁詩正等.

38. Hsi ch'ing ku chien 西清 古鑑. An illustrated catalogue of bronzes in the Manchu imperial collection in Peking, compiled by a commission, 1849-51. 22 pên + 2 pên supplement on coins. Further supplements published subsequently as follows: Hsi ch'ing hsü chien 西清續鑑, 21 pên, 1910; Hsi ch'ing hsü chien i pien 西清續鑑乙編, 20 pên, 1931.

LIU HSIN-YÜAN 劉 心 原.

39. Ch'i ku shih chi chin wên shu 奇 觚 室 吉 金 文 述. Reproductions of rubbings of bronze inscriptions deciphered and annotated. 10 pên, n. p. pref., 1902.

LIU T'I-CHIH 劉 體 智.

40. Shan chai i ch'i t'u lu 善齋 馨 器 圖 錄. Illustrated catalogue of bronzes in the Liu collection, compiled by Jung Kêng 容 庚. 3 pên. Peking, 1936.

Lo Chên-yü 羅 振 玉.

- 41. Chên sung t'ang chi ku i wên 貞 松 堂 集 古 遺 文. The author's collection of ancient inscriptions. 16 pên. Chang-chou, 1931.
- 42. Han liang ching i lai ching ming chi lu 漢兩京以來鏡名集錄. Inscriptions on mirrors since Han times. 24 pp. in vol. 1 of Liao chü tsa chü 遼居雜箸. 2 pên, privately printed, 1930.
- 43. Ku ching t'u lu 古鏡 圖錄. Illustrated catalogue of ancient mirrors. 1 pên, privately printed, 1916.
- 45. San tai chi chin wên ts'un 三 代 吉 金 文 存. Corpus of nearly 5,000 ancient Chinese bronze inscriptions. 20 pên, n. p., 1937.

Lü Pu-wei 呂 不 韋.

46. Lü shih ch'un ch'iu 呂氏春秋. Annals of the Lu family, traditionally ascribed to Lü Pu-wei, d. 235 B. C. Ssü pu ts'ung k'an 四部叢刊ed.

Ma Hsü-Lun 馬 叙 倫.

47. Ling nieh i 令 失 彝. In KHCK vol. 4, No. 1 (1934), 15-20, 1 pl.

MARTIN, F. R.

48. L'age du bronze au musée du Minoussinsk. Stockholm, 1893.

New York, METROPOLITAN MUSEUM OF ART.

- **49.** Chinese bronzes of the Shang (1766–1122 B. C.) through the T'ang (A. D. 618–906). New York, 1938.
- 50. Ning shou chien ku 寧 壽 鑑 古. Illustrated catalogue of bronzes in the Ning shou palace, compiled about 1780 as a supplement to 38. 32 pên. Peking, 1913.

Pelliot, P.

- 51. Les plaques de l'empereur du ciel. In BMFEA No. 4 (1932), 115-116, 1 pl.
- **52.** A review of Otto Fischer, Die chinesische Malerie der Han-dynastie. In TP XXVIII (1931), 452-457.

PLENDERLEITH, H. J.

53. Technical notes on Chinese bronzes with special references to patina and incrustations. TOCS vol. 16 (1938-39), 33-55, 5 pls.

ROBERTS, L.

54. Exhibitions of orient art. In Parnassus, vol. 10, No. 1 (Jan. 1938), illus. p. 38.

SALLES, G.

55. Les bronzes de Li-Yu. In RAA VIII (1934?), 146-158, 8 pls.

SELIGMAN, C. G., and BECK, H. C.

56. Far eastern glass: Some western origins. In BMFEA No. 10 (1938), 1-64, 16 pls.

Ssǔ-MA CH'IEN 司馬遷.

57. Shih chi 史記. Historical memoirs in 130 chuan, completed about 99 B. C. Commentaries by P'ei Yin 裴 駰 (5th cent.), Ssǔ-ma Chêng 司 馬 貞 (8th cent.), and Chang Shou-chieh 張 守 節 (8th cent.). Palace ed., 26 pên, 1739.

Stockholm, HALLWYLSKA PALATSET.

- 58. Catalogue of the collection of Chinese and Korean bronzes at Hallwyl house, Stockholm. Text by Orvar Karlbeck. Stockholm, 1938.
- 59. Hallwylska samlingen, beskrivende forteckning. A catalogue of the Hallwyl collections. Text by Orvar Karlbeck. Stockholm, 1935. Grupp XLIX, Ostasiatiska Småbronser, text 1935, planscher 1933.

Stockholm, Ostasiatiska Samlingarna.

60. The exhibition of early Chinese bronzes arranged on the occasion of the 13th International Congress of the History of Art, Stockholm, 1933. In BMFEA No. 6 (1934), 81–136, 53 pls.

SUMITOMO TOMOZUMI 住友友純.

61. Senoku seishō 泉屋清賞; or, the collection of old bronzes of Baron Sumitomo. Part 1 and supplementary volume and explanatory notes in English by Hamada Kōsaku 濱田耕作; part 2 and supplementary volume and explanatory notes in English by Harada Yoshihito原田淑人. 2d ed., 9 pên, 1921-24.

SUN HAI-PO 孫海波.

62. Hsün-hsien i ch'i 溶縣 彝 器. Illustrated catalogue of ceremonial bronzes from Hsün-hsien, Honan Province. 1 pên. Honan, pref. 1937.

TAKATA TADAHIRO 高田忠周.

- 63. Kochū hen 古籍篇. Encyclopedia of archaic and seal characters. 62 pên. Tōkyō, 1925. T'ANG LAN 唐蘭.
 - 64. Tso ts'ê ling tsun nai tso ts'ê ling i ming k'ao shih 作册 令 尊 乃 作册 令 彝 銘 考釋. A study of the inscriptions on the Tso ts'ê ling tsun and i. In KHCK vol. 4, No. 1 (1934), 21-29, 5 pls.

Tch'ou Tö-yi (Ch'u Tê-i) 褚德彝.

65. Bronzes antiques de la chine appartenant à C. T. Loo et Cie. avec une préface et des notes de M. Paul Pelliot. Paris et Bruxelles, 1924.

TOMIOKA KENZŌ 富 岡 謙 藏.

- 66. Kokyō no kenkyū 古 鏡 の 研 究. Studies on ancient mirrors. Kyōto, 1920.
- 67. Tōkwaan kokyō zuroku 桃 華 盦 古 鏡 圖 錄. Ancient Chinese mirrors from the collection of the late Tomioka Kenzō. Edited by Tomioka Masutaro 富 岡 益 太 郎, and with notes by Umehara Sueji 梅 原 末 治. Kyōto, 1924.

TUAN FANG 端方.

68. T'ao chai chi chin lu 陶 齋 吉 金 錄. Illustrated catalogue of bronzes in the collection of the late Tuan Fang. 8 pên. Shanghai, 1908.

TUNG TSO-PIN 董作賓.

69. Yen chiu yin tai nien li ti chi pên wên t'i 研究殷代年曆的基本問題. The fundamental problems in the study of the chronology of the Yin dynasty. In Kuo li pei-ching ta hsüeh ssǔ shih kuo nien chi nien lun wên chi 國立北京大學四十週年紀年論文集. Fortieth anniversary papers of Peking National University. Vol. 2, pt. 1, pp. 146-171. K'un-ming, 1940.

UMEHARA SUEJI 梅原末治.

- 70. Kanan anyō ihō 河 南 安 陽 遺 賓. Selected ancient treasures found at An-yang Yin sites. Kyōto, 1940.
- 71. Kanan anyō imotsu no kenkyū 河 南 安 陽 遺 物 の 研 究. Research on relics from Anyang, Honan. Kyōto, 1941.
- 72. Kanan anyō to kinson no kobo 河南安陽と金村の古墓. Die alte gräber in Ho-ngan河南 Nan-yang 安陽 und in Chint'sun 金村. In SZ vol. 47, No. 9 (Sept. 1936), 1098-1125.
- 73. Kanan shō anyō shutsudo haku shoku doki sairon 河南省安陽出土白色土器再論. Once more on the white earthenware vessels found at An-yang in Hou-nan Province. In SG vol. 9, No. 4 (Nov. 1939), 545-88, 2 pls.
- 74. Kan izen no kokyō no kenkyū 漢 以 前 の 古 鏡 の 研 究. L'étude sur le miroir antérieur à la dynastie des Han. Kyōto, 1935.
- 75. Kankyō no kenkyū 鑑 鏡 の 研 究. Research on mirrors. Tōkyō, 1925.
- 76. Kan sangoku rikuchō kinenkyō shūroku 漢三國六朝紀年鏡集錄. Repertory of dated mirrors of the Han, Three Kingdoms, and Six Dynasties. Tōkyō, 1931. Supplements to this paper appear in SZ vol. 11, No. 3; vol. 13, No. 2; vol. 16, No. 3.
- 77. O bei ni okeru shina kokyō 歐米 に 於 け る 支 那 古 鏡. Ancient Chinese mirrors in Europe and America. Kyōto, 1931.
- 78. Rakuyō kinson kobō shuei 洛陽金村古墓聚英. Selections from the ancient tombs at Chin-ts'un, Lo-yang. Kōyto, 1937.
- 79. Sengoku shikidōki no kenkyū 戦 國 式 銅 器 の 研 究. Étude des bronzes des royaumes combattants. Kyōto, 1936.
- 80. Shina kodō seikwa 支 那 古 銅 精 華. Selected relics of ancient Chinese bronzes. 7 vols. Ōsaka, 1933-35.
- 81. Shina kōkogaku ronkō 支那考古學論 攷. Studies in Chinese archeology. Tōkyō, 1938.
- 82. Shōkyō kokyō shuei 紹 與 古 鏡 聚 英. Selected ancient mirrors found at Shao-hing tombs. Kyōto, 1938.

WANG Fu and Others 王黼等.

- 83. Hsüan ho po ku t'u lu 宣和博古圖錄. Illustrated catalogue of over 800 bronzes in the Sung imperial collection. Completed about A. D. 1125. 30 pên, pref. 1528; 18 pên, pref. 1752.
- 84. Po ku t'u lu k'ao chêng 博 古 圖 錄 考 正. Same work revised and reprinted by Chêng P'o 鄭 樸. Pref. 1596.

WHITE. W. C.

- 85. The tombs of old Loyang. Shanghai, 1934.
- 86. Tomb tile pictures of ancient China. Toronto, 1939.

Wu Ch'i-ch'ang 吳 其 昌.

- 87. Chin wên li shuo su chêng 金 女 麻 朔 疏 證. Studies on the dates of bronzes of the Chou dynasty. 5 pên. Shanghai, 1936.
- 88. Ts'ê i k'ao shih 失 彝 攷 釋. Study of the inscription on the ts'ê i. In YCHP vol. 9 (June 1931), 1661-1732.

YETTS, W. P.

- 89. A problem of Chinese archaeology elucidated: new light on the kuei. In The Illustrated London News, January 22, 1938. Suppl., p. 1.
- 90. An early Chinese bronze. In The Burlington Magazine, April 1937, 168-177, 1 pl.
- 91. The Cull Chinese bronzes. London, 1939.
- 92. The George Eumorfopoulos Collection: Catalogue of the Chinese and Corean bronzes, sculpture, jade, jewelry, and miscellaneous objects. 3 vols. London, 1929–32.
- 93. Two Chinese mirrors. In The Burlington Magazine, January 1939, 24-28, 2 pls.

Yü Shêng-wu 于省吾.

94. Chi chin wên hsüan 吉金文選. On bronze inscriptions. 3 pên. Peiping, 1932.

LIST OF PLATES

Plat	e e	Page
Fron	tispiece. John Ellerton Lodge	1
1.	35.12 Vessel of the type <i>chia</i>	22
2.	Same (back view)	23
3.	25.3 Vessel of the type <i>chüeh</i>	
4.	23.1 Vessel of the type <i>chia</i>	
5.	38.5 Vessel of the type <i>kuang</i>	
6.	Same (back, cover, and front views)	
7.	39.53 Vessel of the type kuang	
8.	Same (back, cover, and front views)	
9.	41.8 Vessel of the type <i>kuei</i>	
10.	40.3 Vessel of the type ku	
11.	42.14 Vessel of the type yu	
12.	Same (end and bottom views)	
13.	42.1 Vessel of the type <i>huo</i> (cover and front views)	
14.	Same (back and side views)	
15.	38.6 Vessel of the type <i>chih</i> (side and end views)	
16.	40.11 Vessel of the type yu	
17.	Same (end and cover views)	
18.	25.2 Vessel of the type fang tsun.	
19.	38.20 Vessel of the type kuei.	
20.	Same (end view)	
21.	30.54 Vessel of the type fang i	
22.	Same (inscriptions and end view)	
23.	33.2 Vessel of the type <i>huo</i>	
24.	36.6 Vessel of the type <i>huo</i> (in elephant form, two views)	
25.	37.1 Vessel of the type $y\ddot{u}$	
26.	35.22 Bronze tiger (side and top views)	
27.	35.21–35.22 Bronze tiger (front views of the pair)	
28.	31.10 Vessel of the type <i>kuei</i>	54
29.	30.26 Vessel of the type yu (side and end views)	
30.	39.5 Vessel of the type <i>chien</i>	
31.	32.13 Food vessel with cover (side and end views)	
32.	40.23 Bronze mammal (a quadruped)	
04.	39.41 Vessel of the type tou.	
33.	38.7 Food vessel with cover (cover and side views)	
34.	41.9 Bell of the type <i>chung</i>	
35.	Same (top view)	
36.	41.1 Mirror of Shou-chou type.	65
50.	35.14 Mirror of Shou-chou type	65
37.	36.3 Mirror inlaid with gold and silver.	68
57.	35.13 Mirror of Shou-chou type with figures and animals	68
38.	37.30 Mirror of TLV type	72
50.	39.38 Mirror dated in correspondence with A. D. 174.	72
39.	36.4 Mirror dated in correspondence with A. D. 174.	74
39.	37.14 Mirror of Yüeh type	74
40.	37.15 Mirror of Yüeh type	78
40.		78 78
	39.52 Mirror of Yüeh type	18

Plat	e	Page
41.	32.14 Terminal ornament in the form of a dragon head	. 86
	32.15 Terminal chock	. 86
42.	40.10 Ceremonial sickle of bronze and jade	. 88
43.	41.5 Ceremonial blade of the type ko (bronze and jade)	. 89
	41.4 Ceremonial implement of bronze and jade	. 89
44.	39.39–39.40 Pair of ceremonial blades of the type ko	. 90
45.	34.3 Blade of the type <i>tao</i>	. 92
46.	34.4 Blade of the type ch 'i	. 93
47.	34.6 Blade of the type <i>tao</i>	. 94
48.	3 4.5 Blade	. 95
	34.8 Blade of the type <i>ko</i>	. 95
	34.9 Blade of the type <i>ko</i>	. 95
49.	34.7 Blade of the type <i>ko</i>	. 98
	34.10 Blade of the type ch'i (fragmentary)	. 98
	34.11 Blade of the type ko (fragmentary)	. 98
	34.13 Blade with a tubular socket	. 98
	34.12 Blade with a rectangular socket	. 98
50.	29.19 Sword of the type chien inscribed with gold (views of both sides and pommel).	. 99

BRONZES LISTED IN NUMERICAL ORDER

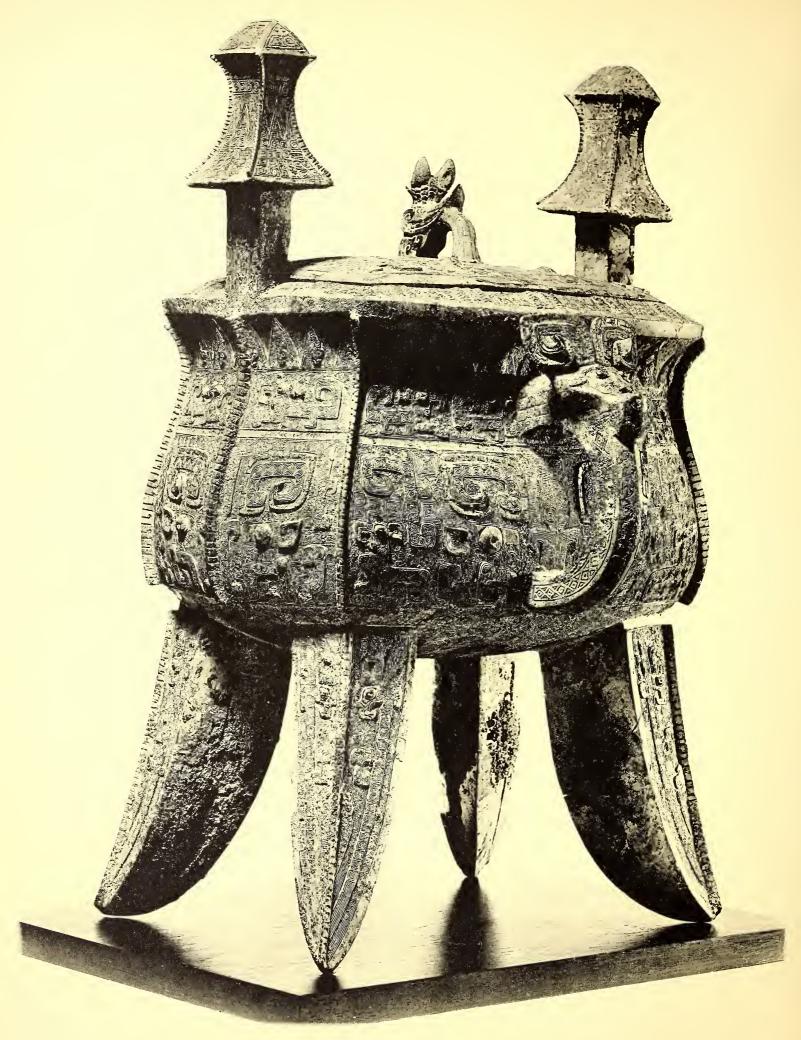
Object number	Plate	Object number	Plate	Object number	Plate
23.1	4	34.11	49	39.5	30
25.2	18	34.12	49	39.38	38
25.3	3	34.13	49	39.39	44
29.19	50	35.12	1, 2	39.40	44
30.26	29	35.13	37	39.41	32
30.54	21, 22	35.14	36	39.52	40
3 1.10	28	35.21	27	39.53	7, 8
32.1 3	31	35.22	26, 27	40.3	10
32.14	41	36.3	37	40.10	42
32.15	41	36.4	39	40.11	16, 17
33.2	23	36.6	24	40.23	32
34.3	45	37.1	25	41.1	36
34.4	46	37.14	39	41.4	43
34.5	48	37.15	40	41.5	43
34.6	47	37.30	38	41.8	9
34.7	49	38.5	5, 6	41.9	34, 35
34.8	48	38.6	15	42.1	13, 14
34.9	48	38.7	33	42.14	11, 12
34.10	49	38.20	19, 20		

CATALOGUE





35.12



CATALOGUE

PLATES 1 AND 2

35.12 Ceremonial vessel of the type chia.

Surface of smooth green patina, with decorations in high relief, low relief, and intaglio. Inscription of one character inside bottom. (See cut.)

Shang dynasty. Height 16 in., width 91/8 in. (.406 x .251 m.) over all.



(A. G. W., J. A. P., 1944.) This character occurs in a number of published bronzes but has not been deciphered. Jung Kêng modernizes it 鏗 (40, vol. 3, p. 27b; pl. 101) but makes no attempt to interpret it. The pictograph itself apparently represents some kind of offering ceremony and may well represent a name, or the official designation of a specific ceremonial functionary.

25.3 Ceremonial vessel of the type *chüeh*.

Surface of a variable apple-green and bluish patina with traces of earthy incrustation. Decoration cast in low relief with strongly projecting flanges.

Shang dynasty. Height 97% in., width 87% in. (.251 x .225 m.) over all.





23.1 Ceremonial vessel of the type chia.

Smooth dark green patina. Tip of one leg broken off. Inscription of one character inside bottom. (See cut.)

Shang dynasty. Height 20^{13} /₆ in., width 12 in. (.528 x .305 m.) over all.



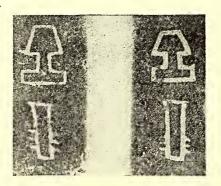
(A. G. W., J. A. P., 1944.) Similar, though not identical, characters are known and identified with the modern wu 戊, the fifth of the 10 cyclical stems. Characters of this group appear as names during the Shang dynasty (63, ch. 87, pp. 2b–5a).

PLATES 5 AND 6

38.5 Ceremonial vessel of the type kuang.

Smooth soft green patina with scattered incrustations outside and in; crisscross mold impression on bottom. Inscription of two characters inside both vessel and cover. (See cut.)

Shang dynasty. Height 91/4 in., width 121/4 in. (.235 x .310 m.) over all.



- (J. E. L., 1938.) The first of the two characters in the inscription represents a building; the second, an axe head. The same characters, but in reverse order, appear in an inscription reproduced by Lo Chên-yü (41, ch. 4, p. 34b). He describes them respectively as a ch'ung wu 重屋 and a fu 斧. The latter term simply means "axe"; but ch'ung wu—literally "double house"—is, perhaps, less definite, although the form of the ideograph certainly suggests "two-storied house" as a probable meaning (see, however, 6, vol. 2, p. 559, ¶29 and note²). In any case the Chou li (12, 冬官, p. 47a; and cf. 6, loc. cit.) says that the people of Yin built such houses—though whether the statement can have any bearing on the dating of our kuang seems at best doubtful.
- (A. G. W., 1944.) Jung Kêng gives the same character as Lo Chên-yü, and identifies it with hêng 享 (20, ch. 5, 30a).

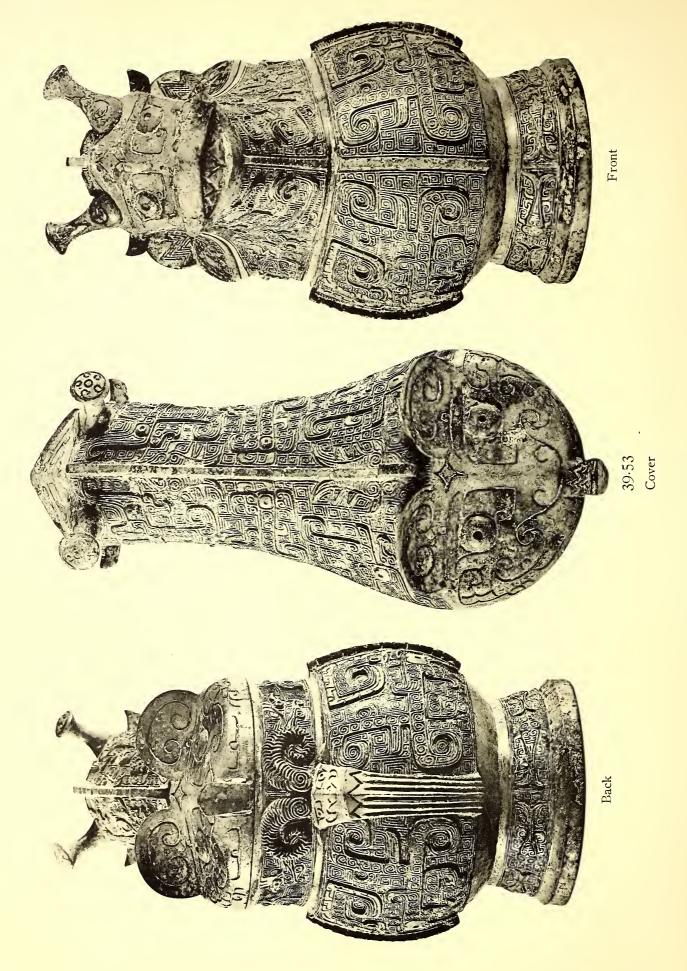
² Biot's note states that ch'ung wu means a double roof.



38.5



39.53



Plates 7 and 8

39.53 Ceremonial vessel of the type kuang.

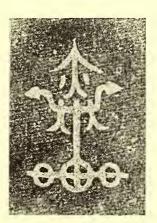
Evenly patinated outside in shades of gray green with flecks of cuprite; inside some azurite with areas of original metal, and a few incrustations.

Shang dynasty. Height 6% in., length 7% in. (.167 x .192 m.) over all.

(J. E. L., 1940.) In method and general appearance the decoration is comparable with that of 35.12, of 40.3, and of other bronzes attributable to the late Shang or, perhaps, the Shang-Chou period. The characteristic feature, of course, is the over-all use of the diaper pattern. This *kuang* seems to be exceptional both in delicacy of execution and in the variety of animals used in the decoration. The handle may be compared with an ivory carving published by the Museum of Far Eastern Antiquities (60, pl. 3, and p. 99) and said to have been found at An-yang.

41.8 Ceremonial vessel of the type kuei.3

Fairly even gray-green patina inside and out; malachite and azurite incrustations on the bottom. Inscription of two characters inside the bottom. (See cut.) Shang dynasty. Height 5½ in., width 8¼ in. (.139 x .210 m.) over all.

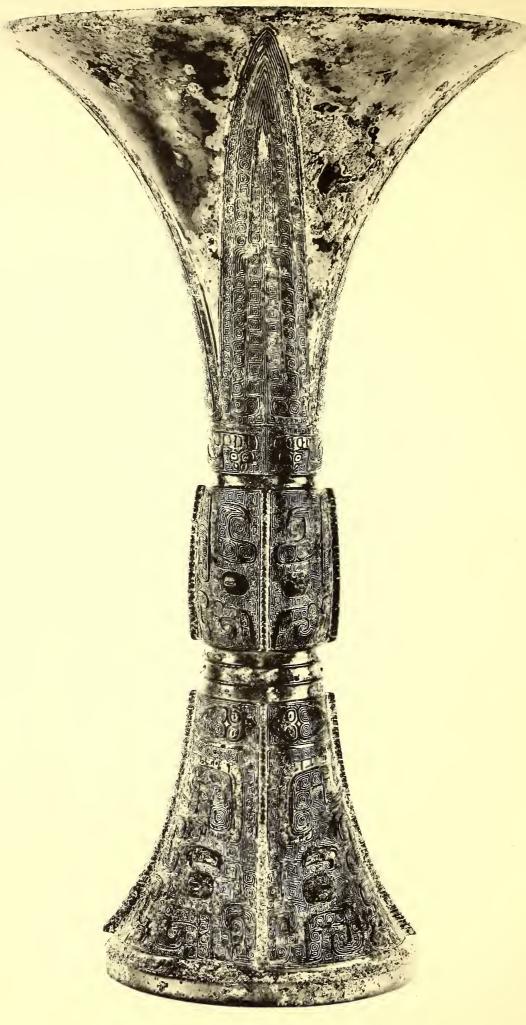


(J. E. L., 1941.) The *kuei* without handles is rather well known, but examples of the *kuei* with handles are far more frequently seen and recorded. This one is unusual both in quality and state of preservation. The beautifully cast inscription reads $i \, ch' \hat{e} \, \vec{\pi} \, \vec{\mu}$, perhaps a name or a monogram.

³ Cf. notes on this type name under 38.20, p. 40.



41.8



40.3 Ceremonial vessel of the type ku.

Silvery gray and gray-green patina with scattered incrustations of malachite and cuprite outside and in. Inscription of two characters inside base. (See cut.) Shang dynasty. Height 11% in., width 6% in. (.284 x .156 m.) over all.



(J. E. L., 1941.) This ku formed part of a set, of which several other members are still extant. I have seen a mate to ours, similarly inscribed, but not in such good condition; and it would seem that there is a third, illustrated and described in the sale catalogue of the H. K. Burnet Collection (8, p. 99 and plate opposite). This latter is very similar to ours in size and decoration, but apparently bears only the second of the two characters with which ours is inscribed. I have seen also two tripod cups of the type *chio* which are decorated in the same style as our ku and bear the same inscription.

The well-cast inscription reads Chung-tê 中 得, a name, no doubt, and characteristic in some degree, perhaps, of Shang names, since Chung-jên 中 壬 was the name of a Shang king, and Chung-tsung 中 宗 the temple name of another.





42.14

PLATES 11 AND 12

42.14 Ceremonial covered vessel of the type yu.

The form is of two horned owls standing back to back. Patination on the outside is gray green with much red (cuprite) in the furrows of the design; inside there is bare metal with incrustations of malachite, cuprite, and azurite.

Shang dynasty. Height 97/16 in., width 83/8 in. (.240 x .213 m.) over all.

(J. E. L., 1942.) This type of yu, while not common, is known in a number of examples. There are, for instance, three in the Sumitomo collection (61, pt. 1, Nos. 69a and b, 70, and 71); one in the Eumorfopoulos collection (92, pls. 16, a21, and 17, and p. 56); another one (11.50, q. v.)4 in our collection; one in the Grenville Winthrop collection (54); one published by Ch'u Tê-i (65, pl. 6 and p. 16); one published in Ning shou chien ku (50, ch. 7, p. 20); three published in Po ku t'u lu k'ao chêng (84, ch. 11, pp. 35-39); and, of course, there may well be others. Those listed above, together with the present example, are, however, enough to illustrate, not only the variety among individual vessels of the type, but also the degeneration of the design in course of time and, perhaps, as between one place of manufacture and another. Thus, taking the present example as prototypical, it is apparent that although the two birds standing back to back are executed with all the formality of the best Chinese bronze technique, they are nonetheless clearly owls—so clearly, indeed, that Dr. Alexander Wetmore has not hesitated to identify the species of this particular one as Bubo bubo, the eagle owl of Europe and Asia, related to the great horned owl of this country. Similarly realistic are, for instance, two of the examples published by Hamada (61, Nos. 70 and 71); but in his third example (op. cit., Nos. 69a and b) degeneration of the design is chiefly apparent in the extent to which the faces of beasts have been substituted for the faces of the two owls. The "horns" and large, round eyes of the owls have, indeed, been retained; but the beaks have been replaced by snouts, and each face has been provided with a wide mouth full of teeth. Of the rest of the owls' anatomy nothing remains except the legs and wings; the body plumage—so carefully indicated on Nos. 70 and 71 and on our present example—is replaced by the conventional background pattern of squared spirals, while around the neck of the vessel is a frieze of small dragons which effectively breaks all continuity between the designs on the cover and those on the vessel. In the example published by Yetts (92) departure from the prototype is less in some respects and, perhaps, greater in others. Thus, on the vessel the legs, wings, and plumage of the owls are fairly typical; but on the cover the two beaks have been replaced by two up-turned projections which are really extensions of the cover rather than elements of the decorative design, while the four round eyes—the only remaining vestiges of the two typical owl faces—serve respectively as the right or left eye of four crested, long-tailed birds seen in profile. Here again all continuity between the designs on the cover and those on the vessel is broken. These two examples from the Sumitomo and Eumorfopoulos collections seem to be fairly early bronzes of good quality; they will suffice, at all events, to illustrate intermediate stages in the degeneration of the double-owl design.

⁴ This bronze is a late reproduction of an archaic type. A. G. W.

The final stage, however, is to be seen in our 11.50 and in four others of the same type: one published by Ch'u Tê-i (loc. cit.), one published in Ning shou chien ku (loc. cit.), and the first two of those published in Po ku t'u lu k'ao chêng (loc. cit.). From these five bronzes every trace of the owls except the legs and wings is gone. On the covers are monster faces of the so-called *t'ao-t'ieh* type; on the vessels only the four legs and the mere shape of the four wings remain; and apart from these features the surface of the bronze is smooth and undecorated. But however nearly the owls have vanished from the vessels, even the tradition of them seems to have vanished from the consciousness of those who first catalogued these five examples. Yetts (loc. cit.) of course recognizes that such bronzes belong to the double-owl type of yu; but the wings on our 11.50 were originally described as "wave designs in relief, ending in bold curling surf"; the example published in Ning shou chien ku (loc. cit.) is labeled "t'ao-t'ieh yu"—with reference, of course, to the two monster faces on the cover; the two examples published in Po ku t'u lu k'ao chêng (loc. cit.) are labeled simply "four-legged yu"; and the one published by Ch'u Tê-i (loc. cit.) is described at some length as having "the appearance of a tortoise" and being, indeed, a "tortoise yu." In this connection it is a mildly curious coincidence that there is a representation of a tortoise in outline on the bottom of Hamada's No. 70 mentioned above. Apart from our present example, and the one in the Winthrop collection, all these vessels, with one exception, are attributed by their respective cataloguers to the Chou dynasty, the exception being the one published by Ch'u Tê-i which is attributed to the Shang dynasty—why, I cannot imagine. Hamada's No. 70 is, I think, the only one that is inscribed: it has a pictorial form of ko 戈 inside both the cover and the vessel. All of them are provided with lugs on the minor axis of the vessel for the attachment of a bail handle. In the case of our present example, the lugs are tubular; but in every other case they have the form of vertical loops, one of which, however, in the case of the example published by Ch'u Tê-i, appears to have been broken off. Out of the entire group, only six still have their bails: Hamada's Nos. 69 and 70, the one in the Winthrop collection, and the three published in Po ku t'u lu k'ao chêng. Of these, Hamada's No. 69 has the type of bail that consists essentially of a stout band of bronze, the under surface flat, the upper rounded, with an animal head and a heavy ring at either end; but the other five all have bails that look like plain-laid cord, the one in the Winthrop collection and Hamada's No. 70 being actually made of bronze, while the drawings of those published in Po ku t'u lu k'ao chêng certainly suggest bails made of some flexible material such as strands of bamboo or leather. Our present example, at all events, must once have had a flexible bail, since a swinging bail made of a rigid material could hardly have been used in connection with lugs which are tubular (cf. 42.1) and, in addition, are partly overhung by two of the flanges on the cover.

Instances of the double-owl design applied to any type of vessel other than the yu seem to be rare: but there is one catalogued as a "Phoenix i of the Chou dynasty" in Hsi ch'ing ku chien (38, ch. 14, p. 26), and an i once offered to us by Dr. Otto Burchard, a dealer. This last is said to have been found in An-yang and

is a very interesting example of early date. Similar to it is a square *i* with complete owls back to back on the cover as well as on the vessel (49, No. 2); and in the same publication (No. 3) is a long-necked yu with both owls complete on the belly of the vessel. No. 61 in the same catalogue is another double-owl yu in the possession of Mrs. Doris Duke Cromwell, New Jersey.

PLATES 13 AND 14

42.1 Ceremonial vessel of the type huo.

Cover in the form of a human face with horns. The patination on the outside is gray green with sparse malachite incrustations; inside, gray, gray green, malachite, cuprite, azurite, and calcareous deposit.

Shang or early Chou dynasty. Height 7½ in., width 8¾6 in. (.181 x .208 m.) over all.

(J. E. L., 1942.) The measurements given above were made with the cover in place and include the horns and the spout. The vessel itself, not including cover or spout, measures .125 x .182; the depth inside is .108; the inside diameter of the mouth is .120; the length of the spout is .055. The base ring is pierced by three symmetrically disposed holes: one below the spout and one below each of the tubular lugs which, when the cover is correctly placed, lie respectively below the perforations in the ears of the mask. Obviously, therefore, a sufficient length of some flexible material—such as twisted or braided strands of bamboo— could be passed through the ear perforations, the lugs, and the two opposite holes in the base ring so as to form a bail by which the vessel could be conveniently held; while it is possible that a shorter length of similar material attached to the third hole in the base ring could have been used as a means of tilting the vessel in the act of pouring the contents through the spout—a mere guess, of course, but a practical expedient, at least, if the vessel were hot.

The huo type of ceremonial vessel usually has three or four legs and a vertical loop handle projecting from the side of the vessel opposite the spout (cf., e. g., 33.2). However, neither a legless variety nor one provided with a bail is by any means unknown, although I have never until now seen a huo having both of these characteristics, or one with the bail placed at right angles to the axis of the spout. Equally exceptional in my experience is the horned human face which forms the cover of this huo. Apart from its bottle-shaped horns, the face can hardly be called monstrous, in spite of its big, staring eyes; but the cast of countenance is not, on the whole, Chinese. This curious head is provided not only with a serpentine body but also with a pair of fore limbs, all shown in relief on the vessel. The body begins at the rim opposite the spout, coils spirally once around the vessel, and ends in a sharp point just above the base ring. The limbs also begin at the rim, opposite one another, but on the axis at right angles to that of the spout; they are bent at the elbow and end in formidable claws; on the upper part of each is one of the tubular lugs. The pattern of concentric squares on the serpentine body breaks off short at the rim of the vessel but is completed on the cover, and if these parts of the design are brought into exact correspondence when the cover is put on, then the perforations in the ears will be above the holes in the lugs, and the cover will be in its correct position—the only position, indeed, in which it fits.

In the *Hsi ch'ing ku chien* (38, ch. 14, p. 10a) a vessel of similar design is illustrated. It is a *kuei* (though catalogued as an *i*) and has a circular cover in the form of two animal faces, one with bottle-shaped horns, the other with spiral horns and both with small, leaf-shaped ears. These faces confront each other and share

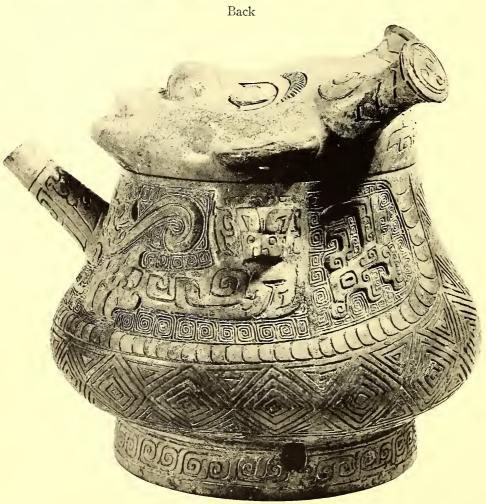


Cover



Front





Side

a common mouth which extends across the middle of the cover. On the vessel—which closely resembles the vessel of our huo in shape—a serpentine body belonging to one of the faces is disposed in much the same way as on our huo. I assume, however, that the other face is also provided with a similar body, so that what the illustration shows is the beginning of one body turning off to the left, and the latter part of the other body coiling around the vessel from the right. On both bodies is a pattern of concentric squares which does not appear, however, to be carried over onto the cover.

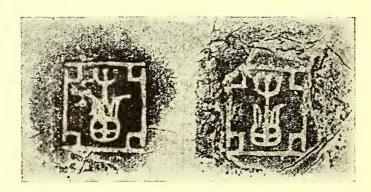
This *huo* is strongly designed and well executed, but lacks, I think, the refinement which characterizes Shang bronzes of the best quality. It seems to be, however, a provincial rather than a metropolitan thing, and although I have dated it early Chou, I see much about it to suggest an earlier date.

(A. G. W., 1944.) One of the striking features of this bronze is the presence in the design of the arms and three-fingered claws of the creature represented by the vessel as a whole. Arms and claws of this type occur not only on the so-called ju hu yu 乳 虚 卣 in the Sumitomo and Cernuschi collections (61, pt. 1, pl. 68; 5, pl. 5, opposite p. 32), and the drum in the former collection (op. cit., pl. 130), but also on a white pottery lei from An-yang (73, pp. 545–588; and 71, pls. 9–16). Jung Kêng classifies the Sumitomo ju hu yu, which he calls a t'ao t'ieh shih jên yu 饕 餮 仓 人 卣, as of the Shang dynasty, and the drum as Shang or early Western Chou (21, vol. 1, pp. 419 and 512). The presence of this curious design on Shang pottery certainly seems to establish plausible connection between that dynasty and all the above-mentioned bronzes, since there appears to be no reason why other elements of the designs should not have been executed at an early period.

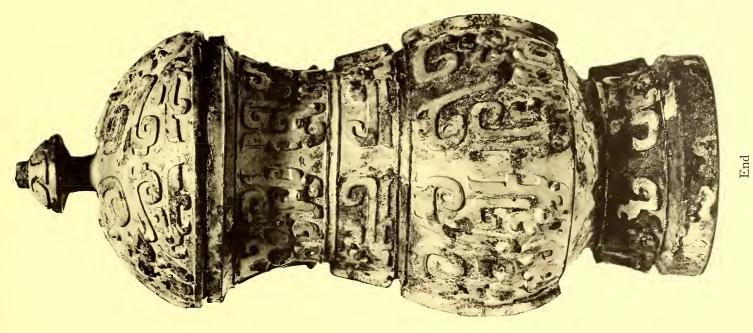
38.6 Ceremonial vessel of the type chih.

Surface of smooth silvery green patina with patches of rough green; earthy adhesions. Decoration in low relief, except for incised lines on knob. Inscription in vessel and cover. (See cut.)

Chou dynasty. Height 7½ in., width 3½ in. (.190 x .089 m.) over all.

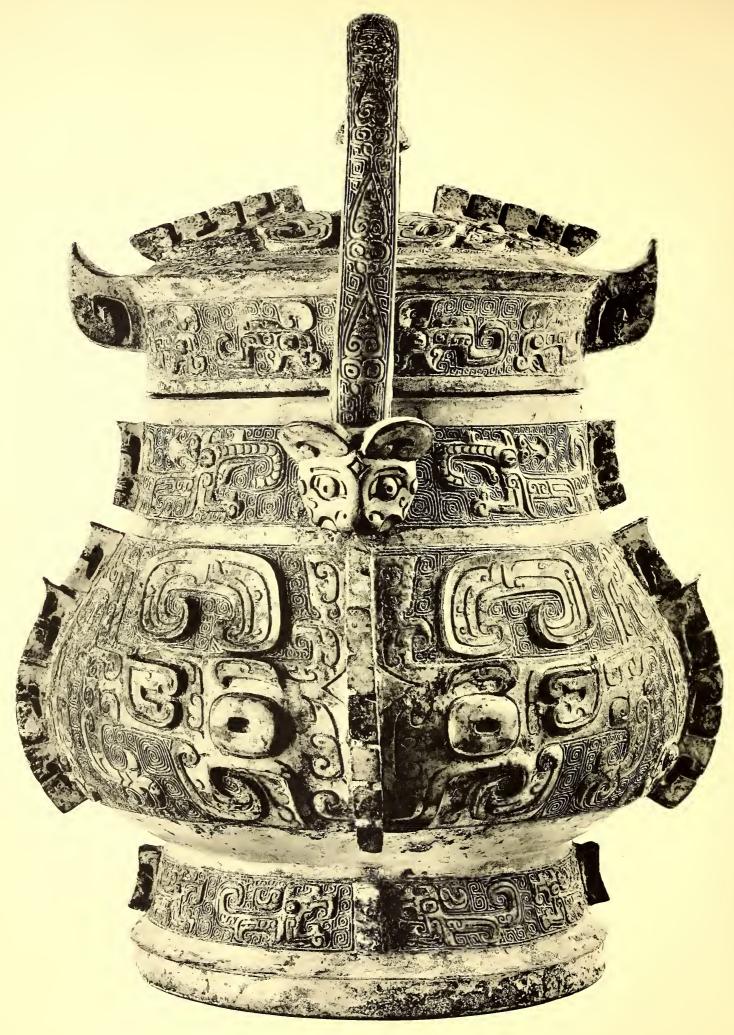


(A. G. W., J. A. P., 1944.) This inscription is published as occurring in a h and a tsun (45, ch. 5, 13a; ch. 11, 3b). The character within the ya hsing \mathbb{H} is given by Takata Tadahiro as an early variant form of the character pang \mathbb{H} (63, ch. 20, p. 7b). However, most present-day Chinese authorities leave it uninterpreted. It is used here, no doubt, as a name. Another vessel very much like this is in the Kano collection. It bears the inscription ifu \mathbb{L} \mathcal{L} (22, No. 19).





38.6



40.11

PLATES 16 AND 17

40.11 Ceremonial covered vessel of the type yu.

Outside, fairly even patination in shades of gray green with flecks of cuprite; inside, cuprite, azurite, and malachite with areas of original metal; little incrustation. Inscription of one character inside both cover and vessel. (See cut.)

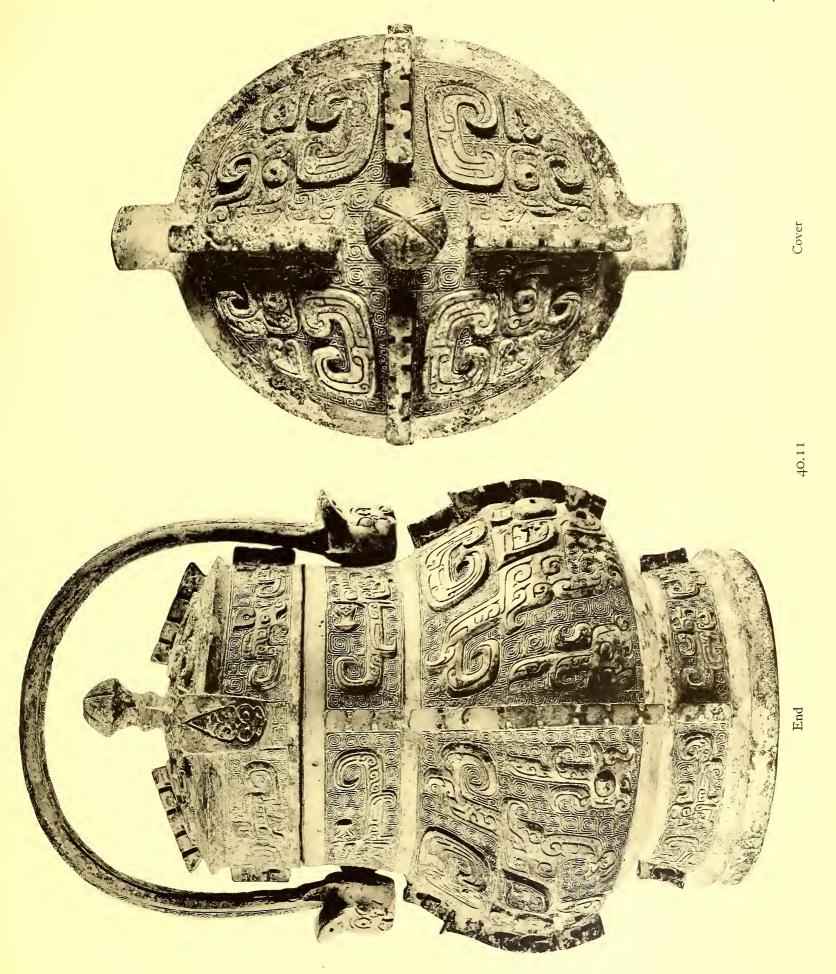
Shang dynasty. Height $14\frac{3}{16}$ in., width $10\frac{1}{2}$ in. (.361 x .267 m.) over all.

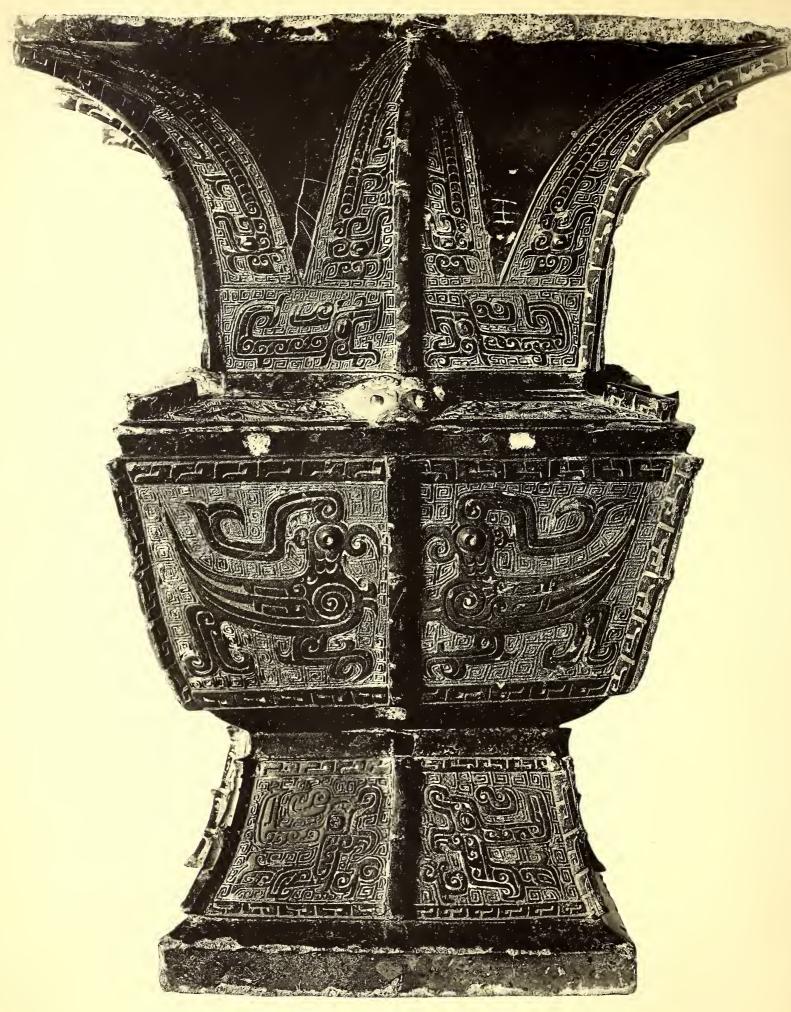


(J. E. L., 1941.) The inscription appears both in the bottom of the vessel and in the cover. I know of at least one other bronze inscribed with this character: it is a fang i of which photographs were sent to me by Karlbeck. This i is, however, very different in style from our yu, and its inscribed bird faces to the left instead of to the right. Of the two, Karlbeck's may be the earlier; but both, I think, belong to the late Shang or early Chou period. A comparable yu has been published by Yetts (91, No. 3, pls. 3 and 4).

(A. G. W., J. A. P., 1944.) Two published inscriptions show characters similar to, though not identical with, this (45, ch. 14, p. 32b; 20, suppl. A, p. 21a-b). No interpretation has been offered, but it may be noted that the character is clearly composed of the $niao \triangleq and ko \approx clearly$ that constitute $y\ddot{u}an \approx in modern script$. Literary evidence points to a certain degree of antiquity for $y\ddot{u}an$; it occurs twice in the *Shih ching* (17, p. 56, 2/30222; 35, vol. 4, pt. 2, pp. 358, 445).







25.2 Ceremonial wine vessel of the type fang tsun.

Surface of smooth dark green patina, with two areas of light green, and a scattering aerugo of malachite green; traces of earthy incrustation. Decoration in low and high relief.

Chou dynasty. Height 13^{15} ₁₆ in., width 11 in. (.353 x .279 m.) over all.

(A. G. W., 1944.) Jung Kêng classifies this vessel as one of four Shang dynasty bronzes of the type *tsun* (21, vol. 1, p. 399; vol. 2, p. 289, fig. 552). The attribution is apparently based on the elements of the design, but the quality and treatment of the vessel as a whole strongly suggest a later date.

PLATES 19 AND 20

38.20 Ceremonial vessel of the type kuei.

Thin, scattered malachite and cuprite patination inside and out. Inscription of 11 characters inside bottom.

Chou dynasty. Height 11 in., width 137/16 in. (.280 x .341 m.) over all.

(J. E. L., 1939.) When the dealer brought this vessel to the Gallery in the autumn of 1937, he did not know (or would not tell) where and when it had been excavated; but he said that he had got it in China, and this *could* be true. In 1935, however, Karlgren published in his admirable *Yin and Chou in Chinese bronzes*, an inscribed *kuei* belonging to Rittergutsbesitzer H. G. Oeder (of Priemern, Seehausen, Altmark, Germany) which, as nearly as I can tell from the reproduction (29, pl. 12), is almost certainly this one—my only serious doubt, indeed, arising from the negative evidence of Karlgren's failure to read the second character in the inscription (op. cit., p. 84, E40), although his reading of the first and third characters (rather commonly found, however, in these dedications) shows them to be the same as the corresponding characters in the inscription given below. On the whole, therefore, it seems more probable than merely possible that this vessel, whenever and by whomever it may have been taken out of China, was latterly in the Oeder collection.

The metal seems to have been originally of a pale golden color which can still be seen in one or two small areas. Patination has nowhere obscured the fine execution of the decorative designs: the whole vessel is, indeed, in a remarkably good state of preservation. The various elements of the decoration all suggest an early date, with the possible exception—in my own experience, anyway—of the human head introduced between the legs of the bird which forms the lower part of either handle.⁵ The mouth of the fabulous beast which forms the upper part of either handle is provided with tusks which look as if they had been broken off short, leaving mere stumps projecting, more or less, beyond the lips. No doubt the tusks were not designed to look as they now do; but since the surfaces of the apparent fractures are confluent in spots, it must be that the actual breaks occurred in the mold—not in the finished bronze.

The great elegance of the inscription suggests a date near the end of the early Chou period. The text is shown on the following page.

The second character in the first column may also be read *chu* 諸. Until fairly recent times, the first character in the second column was regularly transcribed 敦 and read *tui* (cf., e.g., 68, vol. 2; 38, ch. 27–28; and earlier catalogues); but later it was read *chiu* (as below) by many competent scholars (cf., e.g., 41, passim; and 33, ch. 1, passim), and this seems, indeed, to be a better transcription of the ancient character (92, vol. 1, pp. 44–5). At present, however, the tendency apparently is (cf., e.g., Karlgren, op. cit., passim) to substitute for *chiu* its ancient homophone 玺, now pronounced *kuei*, and so designate the whole class of vessels to which this one belongs. The last five characters in the second column constitute a phrase which appears also in other bronze inscriptions. Lo Chên-yü (41, ch. 6, p. 12a-b) reads them 用卵王逆微; but Kuo Mo-jo (33, vol. 1, p. 49) reads 用卵(饗)王逆造, and

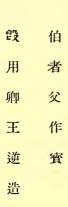
⁵ See, however, 42.1.





38.20

says further (loc. cit., p. 77), ".... ni tsao 遊 造 means ying sung 迎 送 to welcome and see off Speaking as one receiving the king, the expression ni tsao (to welcome and see off) is used." In my reading and translation of this inscription I have followed Kuo Mo-jo.





This may be translated:

"Po Chê-fu made this precious *chiu* to be used for offerings when royalty is formally received."

(J. A. P., 1944.) A brief discussion of the type name *kuei* with illustrations of the various archaic and modern characters concerned has been published by Yetts (89).

PLATES 21 AND 22

30.54 Ceremonial covered vessel of the type fang i.

White bronze patinated with azurite (chiefly inside), malachite, and cuprite. Inscriptions inside cover and inside bottom.

Chou dynasty. Height 1378 in., width 911/16 in. (.351 x .246 m.) over all.

(J. E. L., 1930.) The uppermost element of one of the corner flanges on the vessel is broken off and missing, and three or four elements of the flanges on the knob surmounting the cover are similarly missing. These small fractures are obviously ancient and detract little if any from the surprisingly fine condition of the object as a whole.

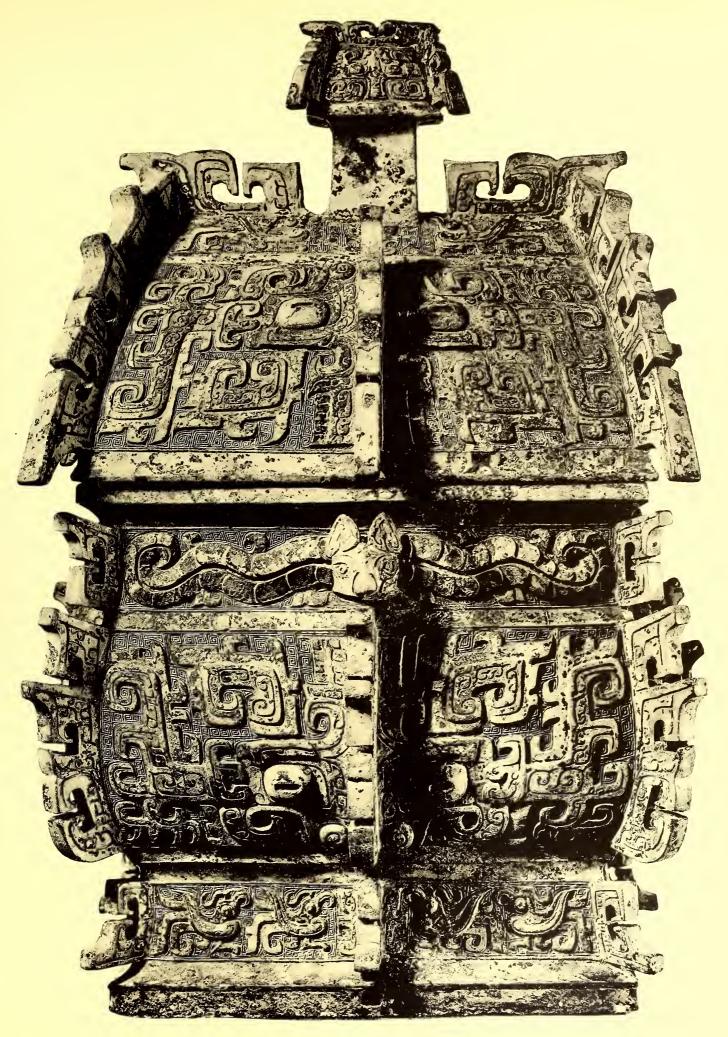
The malachite patina on the outside is generally smooth—even glossy in spots. To a considerable extent, however, the cuprite remains and has a rougher surface. There are a few small patches, also, of uncorroded metal. The patination on the bottom is moderately rough and shows small areas of azurite. Inside, the patina is less smooth and less continuous than outside. The surface of the bottom is largely uncorroded and shows one of the inscriptions to great advantage. Above this, the patination is of malachite and cuprite, while the cover is lined, for the most part, with azurite from which a partial coating of malachite would seem to have been removed in order, perhaps, to reveal the underlying inscription more clearly. Apparently the formation of the cuprite, azurite, and malachite occurred in that sequence.

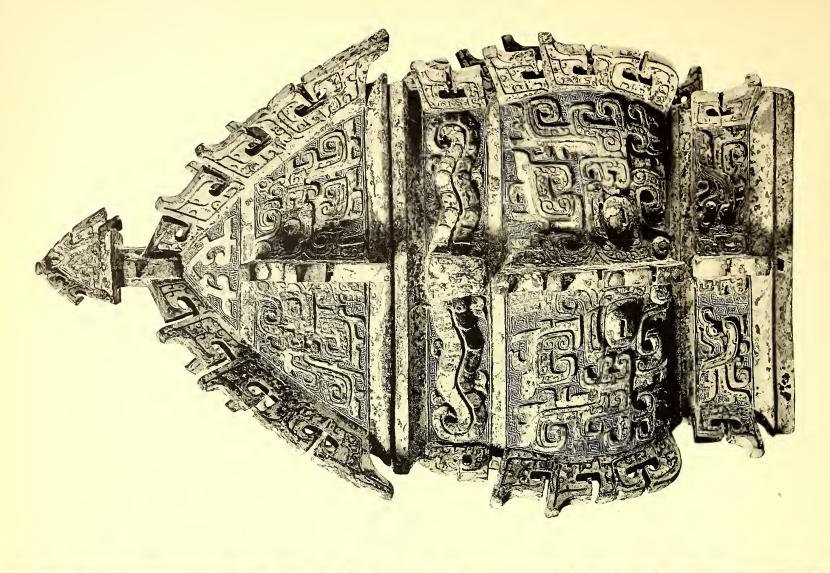
The type fang i, or square i, though not particularly common, is well known; but in size, outline, and technical perfection this example is distinctly unusual. The architectural character of the form is due chiefly to the shape of the cover with its cupolalike knob. The so-called t'ao-t'ieh masks are executed in four—possibly five—planes of relief, and it should be observed that the masks on the cover and knob are upside down in relation to those on the vessel. The two-bodied dragon which appears just below the lip is rather uncommon, although the collection contains two other examples (see 09.260 and 09.261) on bronzes which I believe to be much later and of inferior quality. On each of the four sides, the foot or base flange is perforated in the middle by two square holes—one above the other—and on the bottom of the vessel, each in a fixed relationship to each pair of holes, are four sockets, indicating, possibly, that this i was originally provided with a separable bronze base.

(A. G. W., 1944.) In addition to the above description Mr. Lodge had made a lengthy tentative discussion and translation of the inscription but did not have the opportunity of revising and completing it in the light of more recent studies and discoveries.

The inscriptions are inside, as usual, in the cover and bottom. The characters are vigorously written and admirably preserved. Those in the cover, numbering 187, are written in 14 vertical lines; those in the bottom, numbering 188, are written in 14 vertical lines and one horizontal line of 3 characters only.

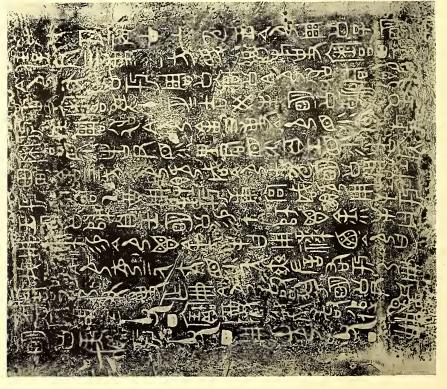
The same inscription also appears upon a *tsun* said to have been discovered with this vessel and our *huo* (33.2) at Lo-yang, Honan.











pper, cover.

Studies of this inscription have been published by such eminent Chinese scholars as Lo Chên-yü (44), Wu Ch'i-ch'ang (88), Jung Kêng (40, vol. 3, pp. 34–38; 21, vol. 1, p. 409), Kuo Mo-jo (32, vol. 1, pp. 5b–10a), Yü Shêng-wu (94), T'ang Lan (64), and Ma Hsü-lun (47). All these studies, with the exception of the two of a later date by Jung Kêng, have been cited by Bernard Karlgren in his excellent work on Yin and Chou bronzes (29).

While the general sense of the inscription is clear, there are certain characters in it which either have not been deciphered, or for which no modern counterpart seems to exist. Therefore, in the following transcription such characters are represented by Roman letters.

```
唯
   敢
      В
             王
                牲
                   咸
                                 于
骚
          金
                       君
                          三
                             月
   揚
       大
          小
             明
                于
                    令
                       В
                          事
                             月
                                 周
                                    三
                                       八
                             吉
   明
      E
          牛
             公
                康
                   甲
                       百
                          令
                                 公
                                    事
                                       月
                                 宫
             錫
                宮
                    申
                       工
                          В
                             癸
      左
         日
                                       辰
      右
             C
                咸
                    明
                       В
                          卿
                             未
                                    方
公
   尹
          用
                                 公
                                       在
賞
                             明
                                 令
   人
      于
          D
             師
                旣
                    公
                       諸
                          事
                                    受
                                       甲
于
   F
      ガ
          迺
             鬯
                用
                    用
                       侯
                          寮
                             公
                                 A
                                       申
父
   用
      寮
          令
             金
                牲
                   牲
                       侯
                          В
                             朝
                                 同
                                    事
                                       王
   作
                于
                                 卿
丁
      以
          日
             小
                   于
                       田
                          諸
                             至
                                    寮
                                       令
用
   父
      乃
         今
             4:
                王
                   京
                       男
                          尹
                             于
                                 事
                                    丁
                                       周
                明
                    宮
      友
                       舍
                          В
                             成
                                 寮
                                    亥
          我
             日
      事
          唯
             用
                   Z
                          里
                             周
                                 唯
                                    令
                                       子
父
   査
                公
                       四
丁
   尊
      作
          令
             D
                歸
                   酉
                       方
                             A
                                 +
                                    大
                                       明
             錫
                   用
                       分
                             令
      册
         女二人C
                自
                                       保
             令
                       旣
                             舍
             鬯
```

In the above inscription there is disagreement over the significance of the character A 没. Wu Ch'i-ch'ang et al. agree, declaring it to be a name and giving its component parts their modern form which produces a nonexistent modern character 诰. The basis for considering this character to be a name is its appearance as a name in other bronze inscriptions. (See 33.2.) Kuo Mo-jo, on the other hand, insists that the character in question is a verb, writing it ඪ, and identifying it in meaning with ch'u 內, and ch'ien 遺, while Jung Kêng, in a more recent work now seems to consider it to be a verb rather than a name as he had previously thought, but writes it in the modern form given above (21, vol. 1, p. 409).

Character B 常 is generally agreed to be a conjunction, and is composed in modern guise thus 眾.

Character C \uparrow is read as t'ai 太 by Lo Chên-yü, Jung Kêng, and Wu Ch'i-ch'ang. Kuo Mo-jo reads it k'ang 亢. It may thus be either a name or part of a title.

Character D 读 represents some sort of rite and has been modernized thus 裤. Character E 爽 is unidentified.

Character F f is modernized as 室 and identified in meaning with hsiu 休.

Character G is the name of the recorder and has not been surely identified, but suggestions such as f and f have been made. The only difference in text between the inscriptions as they appear on the tsun, and in the cover and bottom of the fang i, is in the horizontal line of the bottom inscription of the latter, which, while corresponding with the last line of the cover inscription, repeats the character $ts'\hat{e}$; perhaps with a view to symmetry.

- (1) "Now in the 8th moon, on the day *chia shên*, the King commanded Ming Pao, son of the Duke of Chou, to take charge of the Three Ministries and the Four Directions [i. e., departments having to do with internal and external affairs], and to receive the Chief Ministers."
- (2) "On the day *ting hai*, he commanded Nieh [the name of an Annalist] to report in the Palace of the Dukes of Chou."
 - or: "... the Palace of the Duke of Chou."
- (3) "The Duke [i. e., Ming Pao] commanded A to assemble the Chief Ministers."
- or: "The Duke [i. e., the Duke of Chou] commanded him [i. e., Ming Pao] to go and assemble . . ."
- (4) "Now in the 10th moon, in the first quarter, on the day *kuei wei*, Duke Ming went to audience at Ch'êng-chou."
- (5) "A and [Nieh] Ling gave out the commands of the Three Ministries concerning the Chief Ministers, all the Directors, the Prefects, and all the officers,"
 - or: "He sent orders to give out the commands . . ."
- or: "He [i. e., Duke Ming] sent [Nieh] Ling to give out the commands . . ."
- (6) "and concerning the hereditary nobility, the Marquises, Lords, and Barons, to give out the commands of the Four Directions."
 - or: "... they gave out ..."
- "All commands having been carried out, on the day *chia shên*, Duke Ming sacrificed a victim in the Ching Palace, and, on the day *i yu*, sacrificed a victim in the K'ang Palace. All this accomplished, he sacrificed a victim to the King. Then Duke Ming returned from the King."
- (7) "Duke Ming bestowed sacrificial wine, metal, and a small ox on C Shih, saying: 'Perform D' [a rite of some sort]; he bestowed sacrificial wine, metal, and a small ox on [Nieh] Ling, saying: 'Perform D' [the same rite]. Then he gave orders saying: 'Now I command you two men C [Shih] and Nieh [Ling] E to be on the left and on the right, to be colleagues, and also to serve with loyalty.'"

(8) "The Annalist [Nieh] Ling presumes to extol the beneficence of his Chief Duke Ming by using [material presented by the Duke] to make for Father Ting a precious sacral vessel which he ventures to beg Duke Ming to offer to Father Ting for the glory of Father Ting.

Recorded by G."

In the above translation the two renderings of paragraph (2) merely involve the question of translating the phrase 周 公 密 which might be taken either as chou kung-kung, "Palace of the Dukes of Chou," or as chou-kung kung, "Palace of the Duke of Chou." In the latter case it might refer to a particular duke of the line such as Tan 且 the Duke of Chou who handled the government during the minority of Ch'êng Wang 成 王. The former translation, however, which has the more general meaning of ducal palace is perhaps best as being suitable under any circumstance. There is also the question of the rendering of the character kung 宮 in its usual meaning "palace." The character occurs twice more in paragraph (6) in the names k'ang kung 康 宮 and ching kung 京 宮. In at least these two latter cases the context refers to the performance of certain rites in these places, and so some Chinese authorities tend to interpret the character as miao 廟, "shrine." While this may be true, it seems more likely that the reference is to palaces or their precincts, within which were situated ancestral temples or shrines.

Jung Kêng brings this out in a discussion of another bronze inscription (40, vol. 3, pp. 20a-b). He lists 18 inscriptions, 13 of which contain the character k'ang 康. Among these, aside from those which simply mention the K'ang Kung as such, are the following:

- 1. K'ang shao kung 康 邵 宮: "The Shao Palace in the K'ang [Palace]."
- 2. K'ang mu kung 康穆宫: "The Mu Palace in the K'ang [Palace]."
- 3. K'ang kung ta chih 康 宮 大 室: "The great room in the K'ang Palace."
- 4. Wang tsai k'ang kung hsin kung 王在康宫新宫: "The king was in the New Palace of the K'ang Palace."
- 5. Wang tsai chou k'ang kung tan wang ko mu ta chih 王在周康宫旦王各穆大室: "When the king was in the Chou K'ang Palace at dawn he went to the Great Room of [King] Mu."
- 6. K'ang ch'in 康 寝: "The shrine of K'ang."
- 7. K'ang miao 康廟: "The shrine of K'ang."

From these, it seems that the K'ang Kung was a large palace compound in which, or in the precincts of which, were located the ancestral shrines to former sovereigns. It is important here to mention the inscription in the *kuei* owned by Maj. Gen. Sir Neill Malcolm which mentions Marquis K'ang, a brother of Wu Wang 武 王, the first king of the Chou dynasty, to whom an ancestral shrine might well have been built. This vessel is ascribed to the reign of Ch'êng Wang by W. P. Yetts (90), and to that of Wu Wang by Jung Kêng (21, vol. 1, p. 41). Interestingly enough, a person of this name is mentioned on a weapon, No. 34.6, discussed in this volume (p. 94).

Paragraphs (3) and (5) pose the question of the interpretation of character A mentioned above. Also in paragraph (5) is the question of whether or not the

character ling $\hat{\Phi}$ refers to Nieh Ling or the ming $\hat{\Phi}$ character. The exact interpretation of this paragraph cannot be known until we are sure of the significance of character A $\{\xi\}$, but as we have said before, it seems rather likely that this is a name.

For many years past there has been a lively controversy in regard to the dating of this vessel and others such as our huo (33.2) which were discovered with it at Lo-yang in 1929. Two schools of thought dated these vessels respectively in the reigns of Ch'êng Wang and Chao Wang 昭 王. The chief protagonist of the latter dating was Wu Ch'i-ch'ang (87, ch. 8, p. 21b). He took the San t'ung li 三 統 曆 calendar and computed it backward to the time of Wu Wang 武 王, taking into careful account all items such as intercalary days, etc., which might affect it (op. cit., ch. A, pp. 16-35). It is of extreme interest to note that the results of his over-all calculations as to years connect exactly with those of Tung Tso-pin in his discussion of Shang dynasty dates (69). By means of this carefully worked out chronology, Wu Ch'i-ch'ang believed that he could tell exactly which years contained given days expressed on the bronzes in cyclical characters in given quarters of given moons. From this and other data appearing on the bronzes themselves he undertook to date exactly to the year, moon, and day a large series of inscribed bronzes. However, as Karlgren has pointed out, we do not have detailed knowledge of the various chronological systems known to have existed in the Chou dynasty, and we have no means of knowing which system a given scribe might have used in executing the text for a particular bronze (29, pp. 11-12). Another objection to this system is that it seems very unlikely that the rectification of the calendar by means of the calculation of intercalary days, etc., was made with the same accuracy as that displayed by Wu Ch'i-ch'ang. That is to say, in Chou times a given intercalation might perfectly well have been overlooked, and later attached to a different month, in which case the San t'ung li system as expressed by cyclical characters might be off as much as 60 days, while the over-all effect on the number of years would not necessarily be affected. Be that as it may, Wu Ch'i-ch'ang used this system plus two main points in the fang i inscription to propose an exact dating. The first of these points was the mention of the K'ang Kung, referred to above, which he argued, with great cogency, could refer only to an ancestral shrine to K'ang Wang, and therefore proved that this bronze was made after the time of K'ang Wang. The second point was the mention of the Annalist Nieh Ling in a bronze known as the Ling kuei. This inscription mentions an attack on Ch'u which he thought must refer to the reign of Chao Wang because wars with Ch'u are mentioned in the Chu shu chi nien 竹書 紀 年 as occurring in this reign. With these points in mind, he found that the 6th day of the 8th moon of the 10th year of Chao Wang (1043 B. C.) coincided with the month and day given first in our fang i.

The other side of the controversy was headed by Kuo Mo-jo (32, vol. 1, pp. 5b-10a), whose most important arguments may be summed up as follows: To begin with, he calls attention to paragraph (1) of the fang i inscription, "The King ordered Ming Pao, son of the Duke of Chou..." The duke here mentioned, he says, must be Tan, Duke of Chou, who carried on the government during Ch'êng Wang's minority. As an added proof of this, he cites a vessel known as the Ming Kung kuei 明 公 望 bearing an inscription which mentions Duke Ming and, later, the

Marquis of Lu 鲁 依 who are taken by him to be one and the same person, and therefore the same as the Duke Ming and Ming Pao mentioned in the fang i inscription. From the Chu shu chi nien we know that Po Ch'in 伯 禽, eldest son of Tan, Duke of Chou, became Marquis of Lu during the reign of Ch'êng Wang. As an added proof, he cites what must be the Malcolm kuei noted above. A vessel known as the ta fang ting 大 方 鼎 which was one of the vessels discovered with the fang i is cited by Jung Kêng (40, vol. 3, p. 34b). This ting has an inscription which runs in part . . . Kung tz'ǔ chu wu wang ch'êng wang ssǔ ting . . . 公 束 鑄 武 王 成 王 禩 鼎, "Duke Tz'ŭ cast a sacrificial ting for Wu Wang and Ch'êng Wang . . ." From this we know that this ting was made after the time of Ch'êng Wang. However, the inscription also dedicates this ting to Tsu Ting 祖 T or "Grandfather Ting," which indicates that it was made after the time of the fang i which is dedicated to Fu Ting or "Father Ting." In regard to the question of the meaning of Kang Kung, Kuo Mo-jo (op. cit.) interprets it as simply the name of a palace in the same category as the Ching Kung also mentioned in the inscription. The account of the attack on Ch'u occurring in the Ling kuei he thought might refer to an attack on the Eastern Country recorded as having occurred during the reign of Ch'êng Wang. He cites, furthermore, a bronze known as the Ch'in kuei 禽 簋 which mentions not only an attack on Ch'u, but also says "The Duke of Chou ordered Ch'in to be prayer master" (op. cit., pp. 11, 12). Thus he links all these bronzes together as of the reign of Ch'êng Wang.

Now Jung Kêng as recently as 1941 has listed 91 bronzes as being of Ch'êng Wang date (21, vol. 1, pp. 42–48). He heads the list with a vessel known as the Hsien Hou ting 獻 侯 鼎, the inscription in which runs in part 唯 成 王 大 桑 在 宗 周 . . . or "Now Ch'êng Wang performed a great [ritual] at Tsung-chou . . ." This group includes our fang i, and 31 bronzes of the Ch'ên-ch'ên group of which our huo (33.2) is one, and all 91 seem to be interconnected in some way by the mention in their inscriptions of names of persons, places, events, or by circumstances of discovery, etc. This seems to tip the scales in favor of Kuo Mo-jo's contention of a Ch'êng Wang date. This being the case, but with no intention of insisting on an accurate dating to the day, it may be interesting to see how our fang i date would fare in Wu Ch'i-ch'ang's calendar for the reign of Ch'êng Wang. Our inscription names two months and five days as follows: 八月辰在甲申"the 8th moon, on the day chia shên," the day ting hai 丁亥 in the same moon, and 十月月吉癸未, "the 10th moon in the first quarter on the day kuei wei," also the days chia shên 甲申 and i yu 乙酉. Using Wu Ch'i-ch'ang's table there is only one year (1085 B. C.) during the reign of Ch'êng Wang when these combinations occur as given in the inscription, and the above dates correspond as follows: The 2d and 5th days of the 8th moon, and the 2d, 3d, and 4th days of the 10th moon. Admittedly it would be extremely hazardous to claim such an exact date, but it may be worth noting that it is only 42 years earlier than Wu Ch'i-ch'ang's contention of the 10th year of Chao Wang.

33.2 Ceremonial vessel of the type huo.

Decorations incised in low relief. Smooth gray-green patina. Inside the cover an inscription of 50 characters, of which the last 4 are repeated in an inscription under the handle. (See cut.)

Chou dynasty. Height 8¾ in., width 8¼ in. (.223 x .210 m.) over all.

(A. G. W., 1944.) This huo is one of a group of 19 bronze vessels bearing the name Ch'ên-ch'ên 臣 辰, and said to have been discovered at Lo-yang 洛陽, Honan Province, in 1928. One of these vessels, a yu, which is very different in execution, bears the same inscription as this huo, while the remainder of the inscriptions vary in one way or another. This group of signed vessels accordingly is known as the





Ch'ên-ch'ên group. Interconnected with this group by the mention of names in their various inscriptions were 12 other bronzes which are recognized as part of the Ch'ên-ch'ên group (21, vol. 1, pp. 44, 45, 387). The total find discovered at the same time appears to have amounted to some 35 vessels, and these include our fang i (30.54), with its long and different inscriptions. The marked epigraphical similarities in the inscriptions plus the fact that these bronzes appear to have been discovered together suggests that all are of approximately the same date. This makes the group as a whole extremely important not only on account of the inscriptions, but also on account of the considerable differences in types of decorative technique on the various vessels of the Ch'ên-ch'ên group, as well as on the others. Thus, if we may date two such differently conceived vessels as our fang i (30.54)

and this *huo* as of approximately the time of Ch'êng Wang, a considerable change must be forthcoming in methods of dating on stylistic grounds alone.

Two inscriptions appear on the *huo*, one inside the cover, and the other under the handle. The cover inscription is composed of 50 characters arranged in 6 columns. That under the handle has four characters recording the name of the scribe, Ch'ên-ch'ên, which also occurs at the end of the cover inscription. These inscriptions have been ably discussed by Jung Kêng (40, vol. 3, p. 29a-b), Kuo Mo-jo (32, vol. 1, p. 32a-b), and Kuo Ting-t'ang (34), and the accompanying rendition of the cover inscription into modern characters is based on their findings.

In this inscription there are four characters which may be open to question, and on the rendition of which complete agreement has not been reached. A &, the last character in the first column, is considered by Kuo Ting-t'ang, Kuo Mo-jo, and Jung Kêng as a verb, while Lo Chên-yü, discussing its occurrence in another inscription (44), reads it as an unidentified name. This character written in the same manner occurs on at least five bronzes including this huo and our fang i, and if it is a name it offers further proof of a close connection in time between these vessels. It also occurs in a slightly variant form on two other bronze vessels (20, ch. 2, p. 26b). Among the above-mentioned five vessels is a chih bearing a seven-character inscription in which the character in question is obviously a name (45, ch. 14, 55a). Also the context of the fang i inscription seems less strained if the character is so taken.

The context of the inscription in this huo admits of its being either a verb or a name, but however this may be, the epigraphical similarities of the two inscriptions bracket them closely in time. E \sim , the first character in column four, has been identified with the characters shang \perp and $\hat{e}rh =$, and the former identification seems the most likely. Indeed both Jung Kêng and Kuo Mo-jo agree on this point. C \updownarrow , the fourth character in column four is generally conceded to be yin \gimel , although Kuo Mo-jo disagrees with this and says it is huang \eth . Here again Jung Kêng's list of both characters as they appear on bronzes (20, ch. 13, p. 15; ch. 14, p. 26), really leaves both choices open, but perhaps the former is best. D \ddddot , the last character in column four, has not been identified, but it is generally agreed that its meaning is something like that of $li \rightleftarrows$ or shang \ddddot , and it certainly seems to indicate some sort of ceremonial operation. B \ddddot is taken to be a conjunction as noted on p. 43.

The sense of the inscription is clear and, with the above possible divergencies in mind, may be rendered as follows:

"Now in the year when the King made a great yo ceremony at Tsung-chou A entertained him [or, he (the King) went and lodged] at P'ang-ching. In the fifth month, the third quarter on the day hsin yu the King commanded the Prime Minister and the Annalist Yin to convene at Ch'êng-chou, and D [offer?] pork for the hundred officials, and bestow a yu, aromatic wine, and cowries to be used to make for Father Kuei a precious sacral vessel.

Recorded by Ch'ên-ch'ên, Hsien."

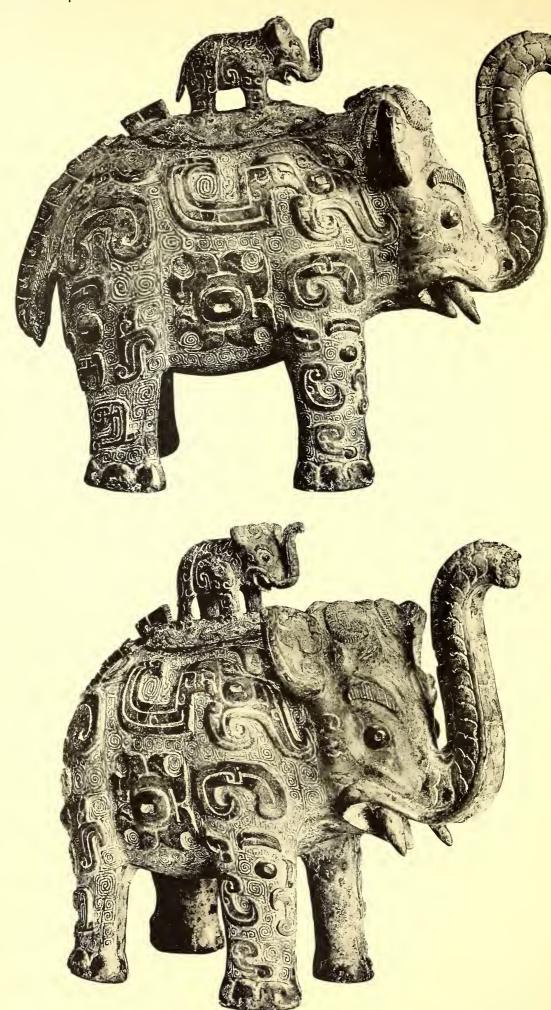
The yo 稿 ceremony mentioned in the inscription appears to have been one of four seasonal ceremonies in honor of the ancestors and took place in the summer (6, vol. 1, p. 422, and 12, 春官大宗伯, p. 8b). This ceremony is also mentioned in the *Book of Poetry* (35, vol. 4, pt. 2, p. 257).

Tsung-chou is well known as an honorific designation for the Chou capital Hao 鎬 established by the first Chou King, Wu Wang 武 王, while P'ang-ching has been identified with Fêng 豐, the capital of Wên Wang 文 王. The two places probably were situated only a few miles apart in modern Shensi Province south of Hsi-an. According to the *Annals of the Bamboo Books*, Ch'êng-chou was established in the 5th year of the reign of Ch'êng Wang 成 王 (35, vol. 3, pt. 1, p. 145). It was located near Lo-yang in Honan, where this vessel is said to have been found.

As in the case of our fang i (30.54) there has been a divergency of opinion as to the date of this vessel. Wu Ch'i-ch'ang, using the San t'ung li calendar, dated this vessel the 17th day of the 5th moon of the 11th year of Chao Wang (1044 B. C.) (87, ch. 6, p. 25b). Kuo Mo-jo, however, believes it to be of Ch'êng Wang date (loc. cit.), and Jung Kêng now agrees with him, listing it with our fang i among 91 vessels of the time of Ch'êng Wang (see 30.54). As noted in discussing the latter bronze, all 91 vessels seem to be interconnected by the mention in their inscriptions of the names of persons, places, events, or by circumstances of discovery, etc. In this connection, it should be pointed out that the bronze heading Jung Kêng's list of 91 bears an inscription which begins: "Now when Ch'êng Wang made a great [rite] at Tsung-chou . . ." (see 30.54). This recalls the beginning of the inscription on this huo, "Now in the year when the King made a great yo ceremony at Tsung-chou . . ." It seems quite possible that these two inscriptions may refer to the same event.



33.2



36.6 Ceremonial vessel of the type huo.

In the form of an elephant. Surface of light green patina. Decoration cast in low relief, with finial in the round.

Chou dynasty. Height $6\frac{3}{4}$ in., length $8\frac{3}{8}$ in. (.172 x .212 m.) over all.

37.1 Ceremonial vessel of the type yü.

Surface of rough green patina, with small areas of unaltered metal and earthy incrustation. Decoration in low relief, high relief, and intaglio. Inscription of seven characters. (See cut.)

Chou dynasty. Height $16\frac{7}{16}$ in., width $22\frac{7}{4}$ in. (.418 x .565 m.) over all.



(A. G. W., J. A. P., 1944.) The first and last characters of the inscription are, as yet, undeciphered. The others repeat the common formula tso pao tsun i 作寶尊靠"... made this precious sacral vessel..."









35.21

35.22

PLATES 26 AND 27

35.21-35.22 Tigers, with open, hollow chamber in the center.

Surface of green patina with traces of earth adhesions. Decoration cast in low relief.

Chou dynasty. 35.21, height 9½ in., length 29½ in. (.252 x .752 m.) over all; 35.22, height 9½ in., length 29½ in (.252 x .759 m.) over all.

(A. G. W., 1944.) According to a manuscript note by Ch'u Tê-i 褚 德 彝, written in 1935, these two bronzes were unearthed in the district of Pao-chi-hsien 實 雞 縣, in Fêng-hsiang-fu 鳳 翔 府, Shensi Province, in 1923. Referring to the Shan-hsi shêng chih 陝 西 省 志 he says, in part, that this territory was included in the territory of Chi which appertained to Hsi Po Ch'ang 西 伯 昌, the Chief of the West, who became Wên Wang 文 王, the first ruler of the Chou dynasty.⁶

⁶ For further discussion of Wên Wang's career, cf. 39.52, pp. 83, 84.

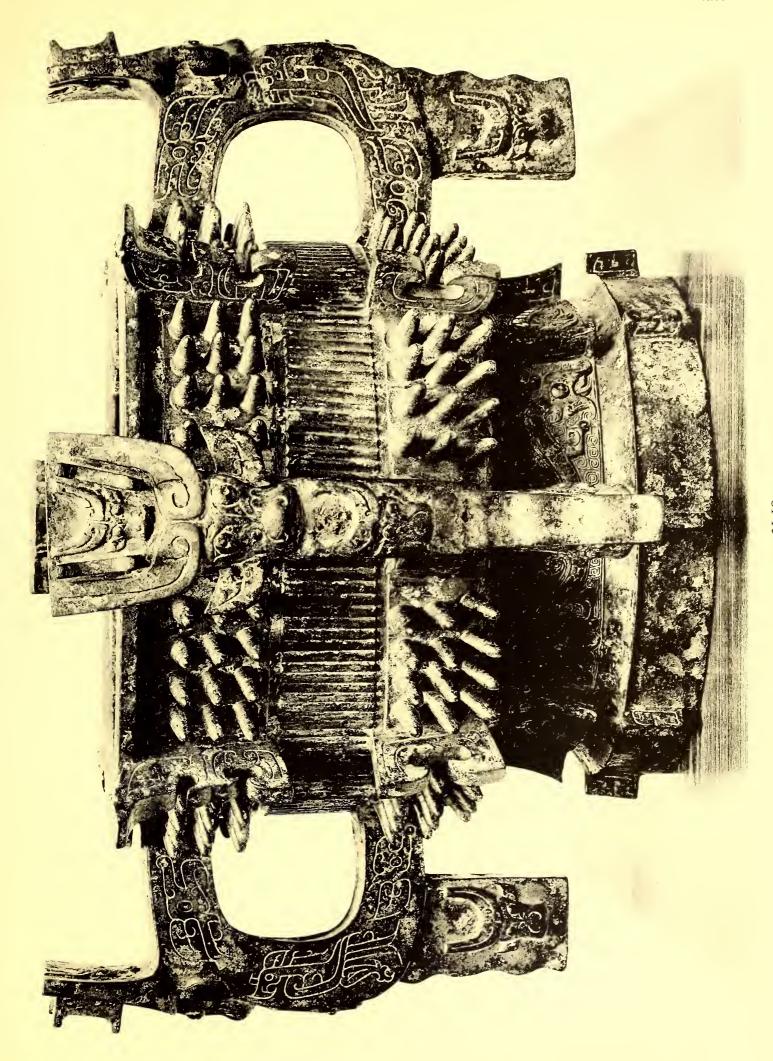
PLATE 28

31.10 Ceremonial vessel of the type kuei.

Surface of silvery patina with patches of green aerugo; rough green patination inside; azurite under foot. Decoration in relief and intaglio.

Chou dynasty. Height $9\frac{1}{8}$ in., width $14\frac{1}{16}$ in. (.231 x .366 m.) over all.

(A. G. W., 1944.) Jung Kêng, apparently basing his conclusions on the elements of the decoration, lists this vessel as one of 59 Shang dynasty *kuei* (21, vol. 1, p. 335), but the general quality and treatment of the vessel as a whole strongly suggests a later date.



End

30.26

Side

30.26 Ceremonial covered vessel of the type yu.
Surface of green patina, with areas of brownish red. Decoration in relief.
Chou dynasty. Height 20½6 in., width 13½6 in. (.509 x .348 m.) over all.
(A. G. W., 1944.) Jung Kêng, in his study of designs, says that the fêng wên 太, or phoenix decoration, which appears on this vessel begins at the end of the Shang dynasty and continues through the Western Chou period. He lists this vessel as one of 49 Shang dynasty vessels of the type (21, vol. 1, pp. 125 and 414; vol. 2, p. 319, fig. 612).

⁷ Cf. 31.10 for dating used here.

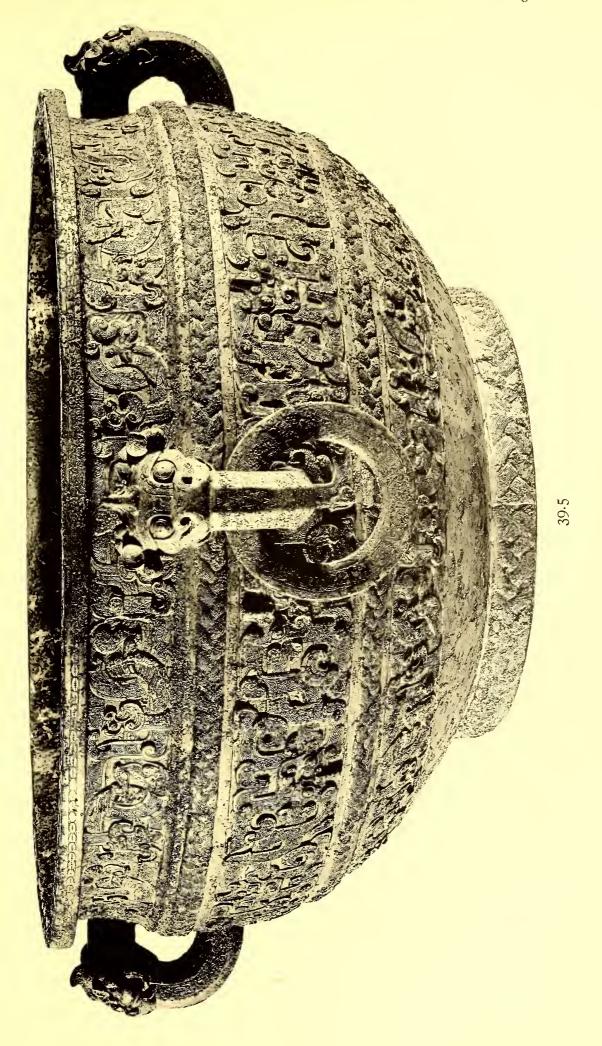
39.5 Ceremonial vessel of the type chien.

Even pale green patination sprinkled with granular incrustations. Inscription of six characters inside. (See cut.)

Late Chou dynasty. Height 8½6 in., width 20¾ in. (.227 x .518 m.) over all. (J. E. L., 1939.) In the Shuo wên (sub verbo) chien 鑑 is defined as ta p'ên 大盆 "a large basin." In the Chou li (12, 天官,凌人; and 6, vol. 1, p. 106), a chien—evidently a vessel of some sort—is said to have been used, on occasion, to hold food, wine, or ice. Both the Shuo wên and the Chou li (12, 秋官,司烜氏; and 6, vol. 2, p. 381) refer also to a kind of chien which was used to "receive bright water from the moon"; but whether the "bright water" was dew or moonlight, and



whether the *chien* which caught it was a vessel or a mirror is by no means certain. More specifically, the Commentary on the *Chou li* (凌人) likens the *chien*, which was used for ice, to a (pottery) jar (*chui* 甄) with a wide mouth. On the other hand, many compilers of Chinese catalogues of bronzes have been so indiscriminate in using the terms *chien*, *p'ên*, ang 盎, yu 盂, and hsi to designate a variety of basin-like forms, that it is now hardly possible to determine, from the shape of a vessel, which of the above terms is properly applicable to it. Fortunately, however, there is no uncertainty in the present case, since the inscription reads: 智君子之弄鑑"*Chien* made by the Noble Chih." This vessel, then, is definitely a *chien*, and a belief that it was used for a ceremonial purpose such, e. g., as the *Chou li* (凌人)





describes, is supported by the character—possibly by the mere existence—of the inscription. To me, indeed, it seems probable that knowledge of whether a vessel should be called a *chien*, a *p'ên*, an *ang*, a *yu*, or a *hsi* may well depend upon knowledge of the purpose for which it was intended, and that whereas the term *chien* may have been correctly applicable only to a ceremonial vessel, and *hsi* only to a vessel for washing or bathing—whether ceremonial or not—the terms *p'ên*, *ang*, and, perhaps, *yu* were, on the other hand, far more general in their proper application—like our words "basin" and "bowl." At present, in any case, the nomenclature of these various basinlike vessels is by no means well defined.

On the whole it seems reasonable to associate the "Noble Chih" of the inscription with the Chih family of the state of Chin 晉. This family and the families of Chao 趙, Han 韓, Wei 魏, Fan 范, and Chung-hang 中行 were the most powerful groups in the state, and their several leaders were known collectively as the 六卿 "six high dignitaries." Emboldened by the growing weakness of the Ducal House, these great families were constantly fighting one another for position and influence. Thus, in 496 B. C. (9, vol. 2, pp. 51–53) the Chih and the Chao (or the Chih, the Han, and the Wei, according to the *Tso chuan*, 13th year of Duke Ting 定) drove the Fan and the Chung-hang from the state. Again, in 453, the Chih, having meanwhile become supremely powerful, were set upon by the Han, the Wei, and the Chao who killed Chih Po 智伯, the able leader of his family, divided his territory among themselves and forced his son Chih K'ai 智開 to take refuge in the neighboring state of Ch'in (9, vol. 4, p. 139, and vol. 2, p. 55). If, therefore, the Chih of this inscription was indeed one of the Chih family of Chin, his *chien* can hardly have been made later than 453 B. C., and is likely to have been excavated in Shansi.

(A. G. W., J. A. P., 1944.) A mate to this vessel is now in the collection of Alfred F. Pillsbury, of Minneapolis. Jung Kêng (21, vol. 1, p. 470) says that the two vessels were unearthed in 1938 at Hui-hsien 輝縣 in Honan Province, and lists them among a group of eight vessels of the type of the Warring States period.

PLATE 31

32.13 Covered food vessel.

Ellipsoid in section, with one large and one small fragment missing from cover. Two annular handles opposite on the minor axis. Three ducks and two stops on cover. Decorated with two horizontal bands of diaper pattern on the vessel. Patches of azurite, malachite, and cuprite patination inside and out.

Late Chou dynasty. Height 61/16 in., width 73/16 in. (.153 x .164 m.) over all.

(J. E. L., 1932.) I do not know just how this piece should be classified as to type unless it be called a *kuei* or *hsü*. I am not aware of any vessel, actual or illustrated, exactly like it; but perhaps it is not, strictly speaking, a sacrificial vessel.

A large proportion of the original surface is still intact, especially inside the vessel, and the patination is nowhere very deep. There is a relatively small amount of mineral incrustation due to burial. Originally, no doubt, there were four small stops serving to keep the cover in position. Two are still perfect; the overhang of a third is broken off, and a fourth has vanished with the large fragment that is missing. Neither of these fractures seems to be very old, and about 2 centimeters from the broken stop is a small crack in the cover which is probably contemporary with them. This crack is about 1 centimeter long and causes a slight dislocation of the edge of the cover but is otherwise hardly noticeable outside.

At either end of the major axis of the vessel there is a vertical line of division and slight dislocation across the broader band of diaper pattern. This may indicate the use of a two-piece mold. The narrower band is simply a horizontal section of the same design. Vessel, cover, and decorations are all of the finest workmanship.

This bronze, together with a number of others, is reported (cf., e. g., 55; 79) to have been excavated at or near a village called Li-yü, in northern Shansi, and from the notes of Monsieur L. Wannieck, by courtesy of his widow, we have the following information:

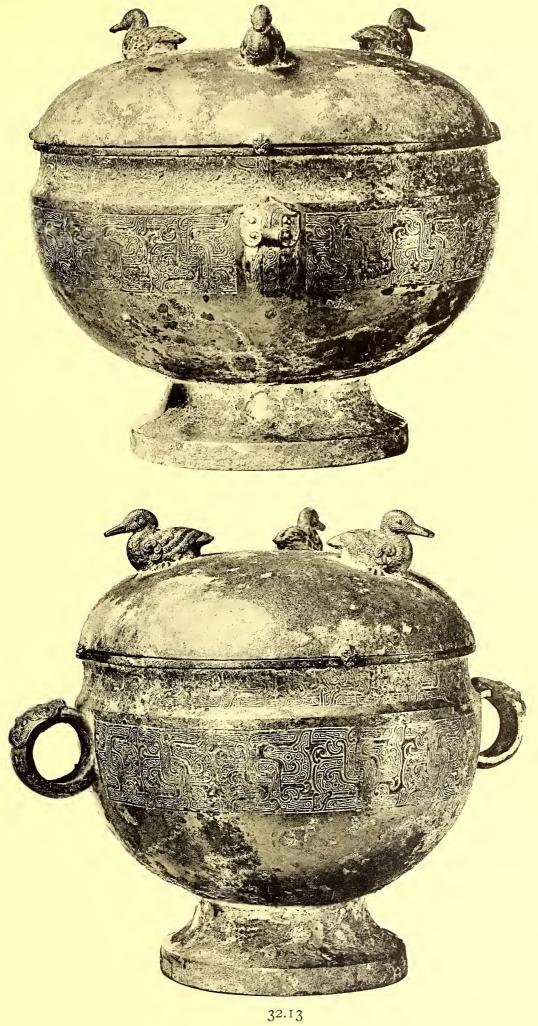
"The treasure of Li-Yu was discovered in March, 1923. The village of Li-Yu is situated 120 li south, south-east of Ta-Toung-Fou, and 12 li west of the underprefecture of Huan-Yn-Chow, situated in northern Shansi.

"The towns of Li-Yu and Huan-Yn-Chow are to be found at the foot of the northern slope of Ho-Chan, one of the five sacred mountains of China.

"It was after a storm had broken down a cliff that the treasure was discovered. A peasant who came down from the mountain perceived a large excavation, and in this excavation he saw the bronzes. Immediately, he went to the village of Li-Yu to tell the inhabitants, who returned with him to this point and, with the aid of pickaxes and mattocks, removed from these holes a number of bronzes.

"In the greed for gain they made their search hurriedly, which had the disadvantage of destroying nearly two-thirds of the pieces, and they carried away the remainder.

"The next day, the Prefect of Huan-Yn-Chow, being informed of these finds, sent to Li-Yu a detachment of soldiers who searched the houses and carried away 17 pieces. As a recompense for these 17 pieces, the Prefect gave the inhabitants of the village a certain sum of money.





"The bronzes were shown at the Yamen of Huan-Yn-Chow.

"At this time I was in the Ordos searching for Scytho-Siberian objects. Upon hearing of the discovery in question, I went immediately to the place where, by the courtesy of Reverend Father Vleschouwer, I learned the details of this discovery. Following his advice, I established myself in Li-Yu and succeeded in acquiring all the other bronzes which the peasants had hidden from the soldiers.

"I then tried to make arrangements with the Government for the acquisition of the 17 pieces, but my efforts were in vain.

"I left the place after giving the necessary instructions to the Reverend Father Vleschouwer to try to purchase the 17 pieces at any price.

"The following year, 1924, the Reverend Father Vleschouwer made a contract of sale with the authorities, which contract I possess in good and due form.

"However, certain antique dealers in Peking prevented me from taking the objects away, and the bad faith of the authorities went even to the length of substituting bronzes bought by certain 'casseroles,' at the same time exacting the price agreed upon.

"Happily, I had taken care to photograph the bronzes, and I was in a position to refuse those which they wished to sell me in their place . . .

"Last year after the invasion of the town of Huan-Yn-Chow by the soldiers of Fê(ng)-Yu-Hsiang the authorities pretended that the bronzes had been destroyed and carried off . . .

"The Chinese have declared this was the site of a sacrifice which the Emperor Tsin-Che-Huang-To(Ti) made to the spirits of the Holy Mountain, but there is no accurate information which permits us to draw this conclusion."

No doubt the Huan-Yn-Chow of M. Wannieck's note is Hun-yüan-chou 渾源州 (now hsien 縣), situated 120 li SE. of Ta-t'ung; and 18 li SW. thereof is a place called Li-yü 李峪 which, quite probably, is the reputed site of the "find." What mountain Wannieck's "Ho-Chan" may be, I do not know.

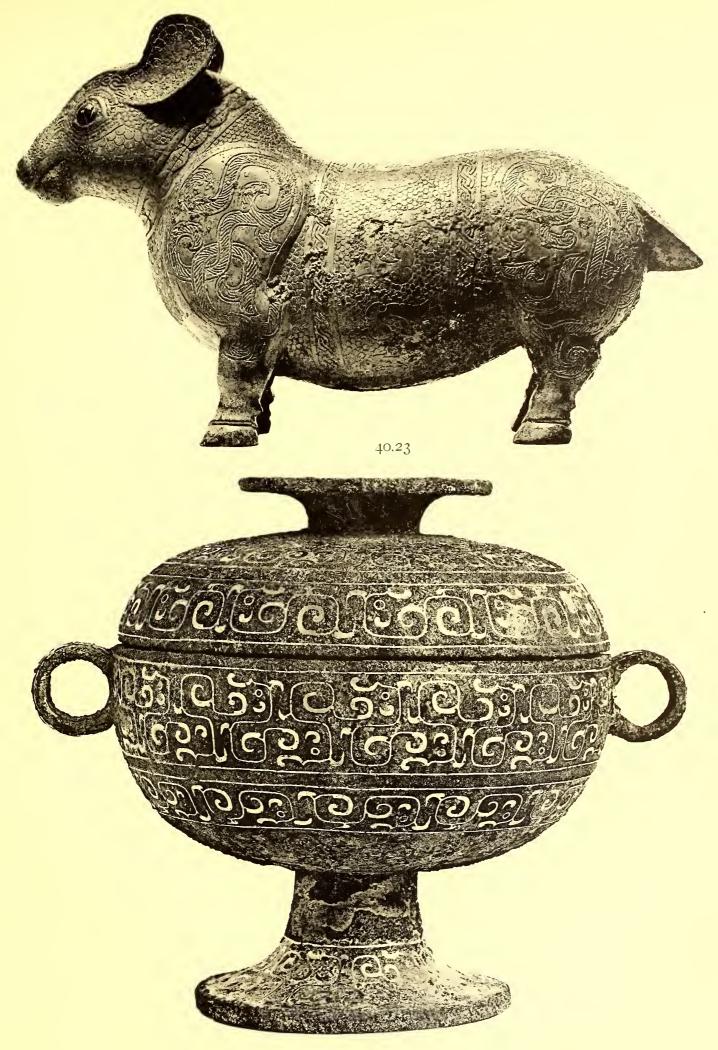
(A. G. W., J. A. P., 1944.) Jung Kêng classifies this vessel as a *tui*, but his classification as a whole is not convincing. It might just as well be considered as a late variation of the type *kuei*, or a modified form of the type *tou*, with both of which it has much in common, and perhaps the latter type is the most suitable. Jung Kêng says that this vessel was unearthed at Hun-yüan 渾 源 in Shansi Province (21, vol. 1, p. 368).

PLATE 32

40.23 A quadruped.

Surface almost entirely covered with linear and countersunk naturalistic and decorative designs. Smooth gray-green patina with scattered incrustations of green and blue. Vent in belly.

Late Chou dynasty. Height $4\frac{1}{2}$ in., length $7\frac{3}{16}$ in. (.115 x .182 m.) over all. (J. E. L., 1940.) The creature is evidently an ungulate mammal of some sort, the heavy body, short, stout legs, large ears and rudimentary tail suggesting a tapir, while the hoofs do not. Incidentally, the Malayan tapir seems to be the only animal of the kind native to Asia; but tapir bones are reported from the excavations at An-yang (13, p. 76). The pebbling and scales of various sizes which cover so much of the surface may be intended to suggest skin texture or hair. The collar of cowrie shells, the two bands encircling the body, and the narrower branching band running from nose to tail are suggestive of harness, while the designs on the fore and hind quarters seem to be purely decorative. Ceremonial vessels made in the shape of this animal are commonly called hsi tsun 犧 尊, the character hsi meaning a sacrificial victim of uniform color—more specifically, an ox, sheep, goat, or pig—fit to be offered in sacrifice (hence: spotless, pure). This term seems to have been derived, not from the text of the Chou li, as is sometimes implied (61, pt. 1, pl. 34), but from the Commentary on that text by Chêng Hsüan 鄭 亥, who suggests that in the name of a ceremonial vessel which the *Chou li* calls a *hsien* tsun 獻 尊 (12 春 官 司 尊 彝; and 6, vol. 1, pp. 472-473), the term hsi should be substituted for the term hsien. In this, however, he is not consistent, because he specifies the hsien tsun as first of the group of "six tsun" to which the Chou li refers in an earlier passage (12 op. cit.; and 6, vol. 1, pp. 445–446). Nevertheless, the term hsi tsun has been generally adopted by cataloguers as the correct name of the ceremonial vessel made in the shape of this animal and, indeed, it is not important to the present zoological inquiry whether hsien or hsi be accepted as the proper term. Hsien, meaning a fat dog suitable for sacrifice (hence: to offer), is more precise than hsi; but in describing this particular kind of tsun, either term might merely mean a sacrificial animal of some vague sort, or might be taken in one of its other senses, such as "offering" (hsien) or "spotless" (hsi), while neither can well be understood as the specific name of an animal which, though plump enough, perhaps, for sacrifice, is certainly not a dog nor yet an ox, a sheep, a goat, or a pig. In any case, a good many examples of this type of tsun have been reproduced in the standard catalogues, and in the *Hsi ch'ing ku chien* (38, ch. 9, pp. 27–39) for instance, it is noticeable that although the dozen animals represented are all essentially like ours and, therefore, as Euclid might say, like one another, there are, nevertheless, substantial differences among the types of hoofs with which the beasts are provided some having cloven, some solid, hoofs; more artiodactyl, some perissodactyl; and one of the latter (op. cit., p. 29) with three toes to each foot, like the hind feet of a tapir. The first vessel in this group (op. cit., p. 27) is attributed to the Chou dynasty and bears an inscription in which the vessel itself is referred to as a hsi tsun. As published, this inscription has somewhat the appearance of an inked squeeze;



39.41



but, like all the inscriptions in the *Hsi ch'ing ku chien*, it is really a copy and thus less reliable than a true reproduction. There is, however, no good reason to think that the cataloguer misread it or misjudged the age of the vessel, inasmuch as the *Tso chuan*, in the 10th year of Duke Ting 定 (499 B. C.), refers to a *hsi* vessel of some sort—probably a *tsun* (35, vol. 5, pt. 2, p. 775, line 1).

(A. G. W., J. A. P., 1944.) Animals of this type were among the objects found at Li-yü, from which find our vessel No. 32.13 is said to have come (55, pl. 50; 79, p. 25, pl. 20, 2; pl. 21, 1, 2).

39.41 Ceremonial covered vessel of the type tou.

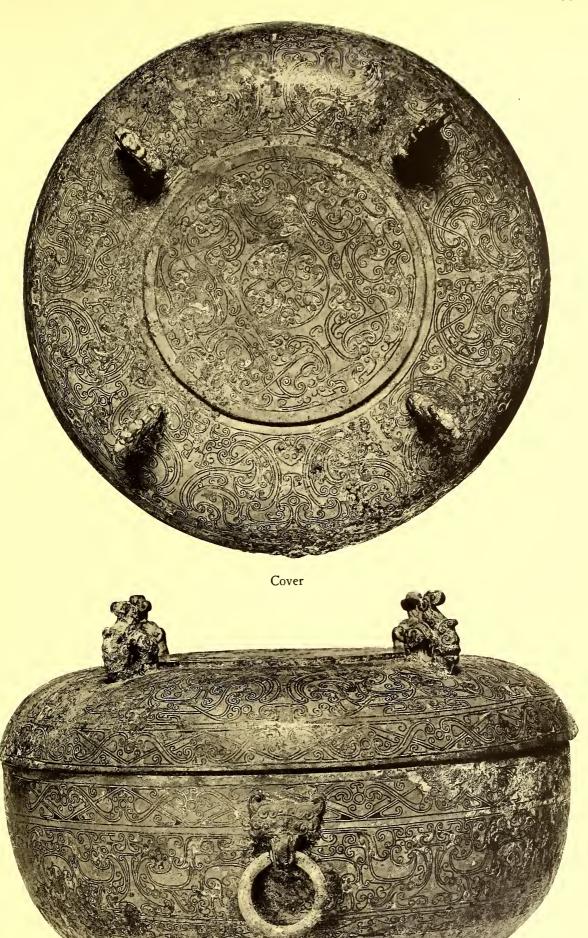
Crusty green patina with design inlaid in gold, and two annular handles on opposite sides.

Late Chou dynasty. Height $51\frac{5}{16}$ in., width $7\frac{7}{16}$ in. (.151 x .189 m.) over all.

38.7 Food vessel with cover.

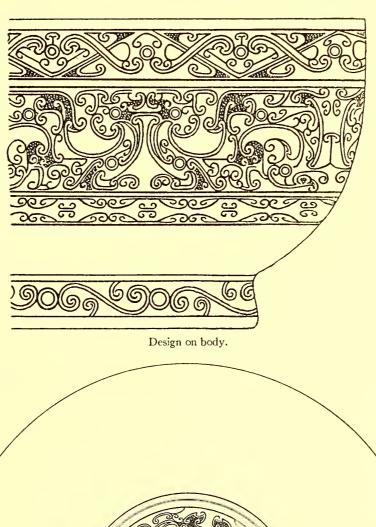
Surface of smooth gray-green color outside with patches of incrustation; rough green inside. Decoration inlaid with silver; mask-and-ring handles, and four upright handles on top of cover in relief.

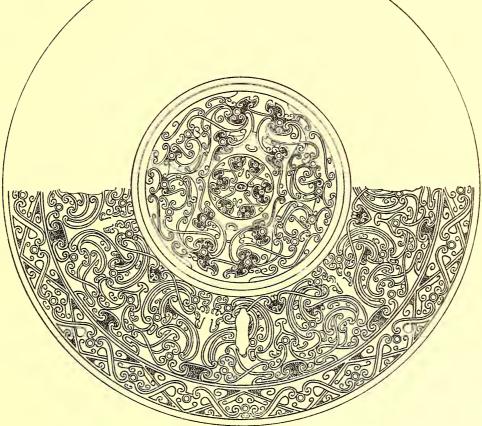
Late Chou dynasty. Height $5^{13}/_{6}$ in., width $83/_{4}$ in. (.148 x .222 m.) over all. (A. G. W., 1944.) The classification of this vessel as to type is not clear. It might well fall into Jung Kêng's rather nebulous class of the type tui but also has much in common with the type tui (cf. notes on 32.13). The four handles on the cover indicate that it could be turned over and used as a container supported by the handles. The vessel is unusual, both in design and type, and the inlaid decoration is of remarkable quality.



38.7







Design on cover.

PLATES 34 AND 35

41.9 Bell of the type chung.

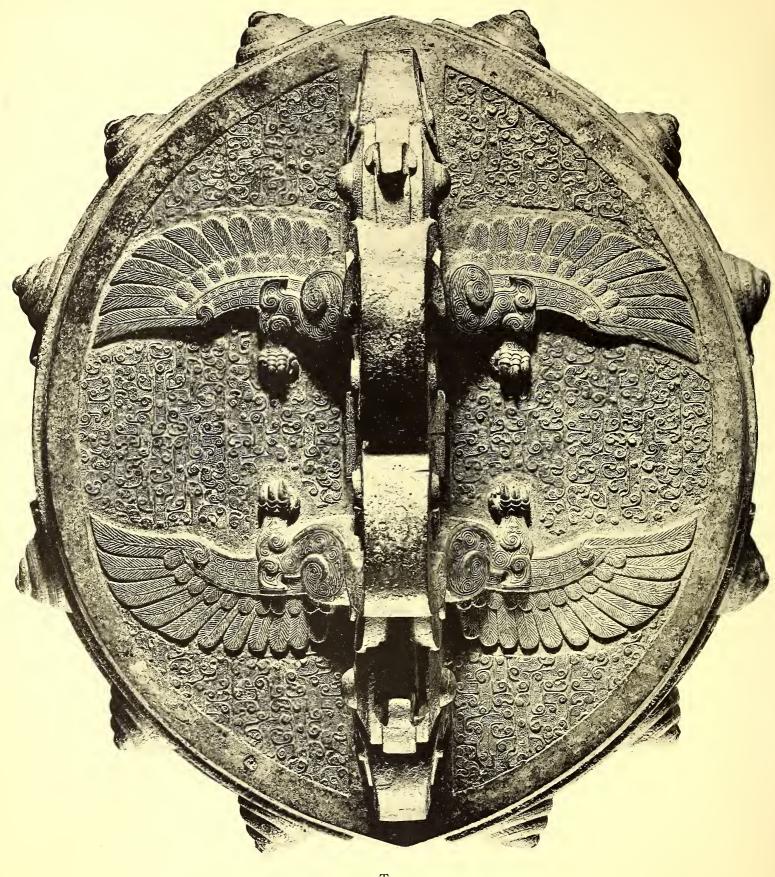
Pale green patination with patches of blue, and granular incrustation. Decorated with casting in relief.

Late Chou dynasty. Height 26½ in. (.664 m.), interior minor axis 15¾ in. (.391 m.), weight 138 lb. 8 oz.

(A. G. W., J. A. P., 1944.) The chung is a well-known type of which many examples were cast during the latter part of the Chou dynasty. It is characteristically ellipsoid in section. Approximately the upper two-thirds of the surface is frequently divided into four sections, each section being again divided into five registers of which the bottom, central, and top registers each contain a row of three bosses, in this case representing coiled serpents with feline heads. The other two dividing registers contain the characteristic interlaced design of the period which also appears on each side in the central portion of the lower third of the bell. There is a vertical space between the two sets of registers on either side, on which inscriptions sometimes appear, although there is none in this case. The suspending device on this bell is composed of two crested, parrot-beaked, wing-legged creatures, standing breast to breast with their heads turned backward and swallowing their own tails. The bell and all the designs thereon are cast with great clarity, and the object as a whole is of unusually fine quality. Three smaller bells apparently belonging to the same set are now in collections in this country. One belongs to the Art Institute of Chicago, and two are in the Winthrop collection of the Fogg Museum of Art, Cambridge, Mass.



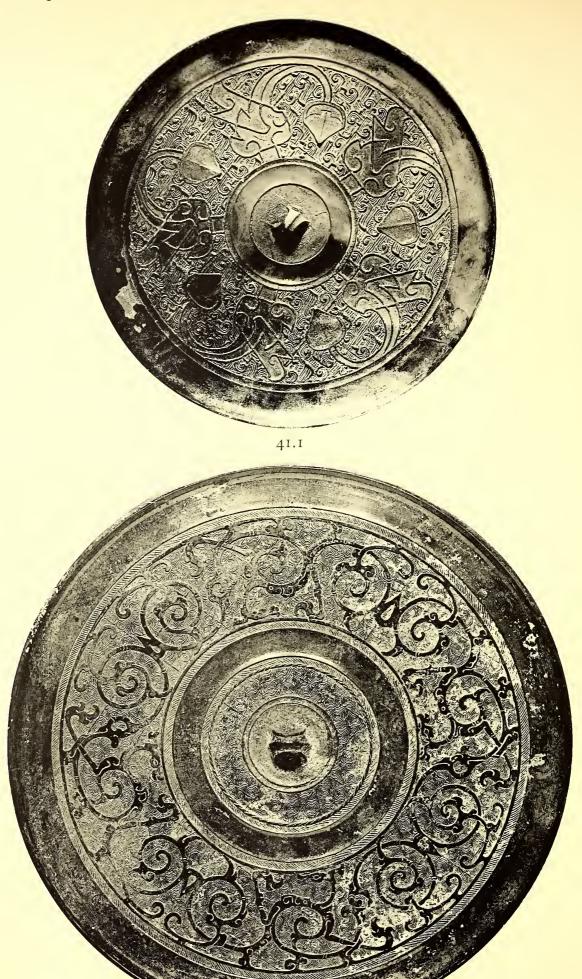
Plate 35



Top

41.9





35.14

41.1 Mirror.

Patinated in shades of gray with slight incrustations of malachite and rust on the obverse. Decorated with casting in relief.

Chou dynasty. Diameter 6½ in. (.164 m.).

(J. E. L., 1941.) Regarding this mirror, Mr. Cox⁸, in his letter of October 3, 1940, says: "The mirror was excavated at Ch'ang-sha 長沙, Hunan Province, in July of 1937. The tomb was of deep shaft construction of the type briefly described in the brochure published by the Associates in Fine Arts at Yale University at the time of the exhibition of the Ch'ang-sha antiquities. The only other objects known to have been associated with it are two tanged, three-flanged arrow-heads in my collection. As for the decoration, this appears to be the only occurrence at Ch'ang-sha among some two hundred examples. The mirror bears No. 37.282 in the Ch'ang-sha collection."

The thin, flat body and reverted rim of this mirror, the slender, ribbed suspension loop, and the background design of curls, feathers, and dots are all characteristic of late Chou dynasty work (cf., e. g., 91, Nos. 18 and 20, pls. 23 and 24), and with them the five large birds are entirely harmonious in execution. The birds themselves, however, are certainly unusual in mirror decorations. Though highly stylized, they seem to represent some sort of goose or swan (hung 鴻); but their exact symbolism is unknown to me. Apparently the mirror at one time lay on a finely woven textile, impressions of which can be seen in the gray patination of the obverse. The incrustations on this surface may well have come from other metal objects buried with the mirror, since the malachite does not seem to have arisen from the bronze of the mirror, while the reddish incrustation looks like iron rust.

(J. A. P., 1944.) On the basis of many years of experience in the field and in handling ancient Chinese bronzes of all kinds, Orvar Karlbeck has observed that pre-Han mirrors fall into two major groups and "that types common at Loyang 洛陽 are but rarely met with at Shou Chou 壽州 and vice versa." (58, p. 15.) He first drew attention to the Shou-chou group in 1926 (23), and his knowledge of provenance has been heavily drawn upon and fully acknowledged by Karlgren (26), where numerous examples of both types are illustrated.

This mirror is one of the types in the Shou-chou group, and similar examples are reproduced by Karlgren (op. cit., pls. 20–24). His number C74 is taken from Liang (37, vol. 1, fig. 33) and is markedly similar in respect to the main design of the five birds and the ground pattern. In his description, Liang also mentions thin reddish-brown corrosion.

Notes on Shou-chou appear in the above-mentioned writings of Karlbeck and Karlgren, and also in Yetts (92, vol. 2, p. 31). It is sufficient to note here that Shou-chou was the capital of the state of Ch'u 楚 during the last 18 years of its existence, 241–223 B. C., and that it had probably been a well-known center of Ch'u culture for some time, perhaps centuries, before that. Later on, in Han times, it was the seat of the princes of Huai-nan 淮 南, the last of whom, Liu An 劉 安 (better known as the patron under whose auspices was published the collection of

⁸ John Hadley Cox, one-time resident of Ch'ang-sha.

Taoist writings known as the *Huai-nan-tzǔ* 淮 南子), died in 122 B. C. The state of Ch'u, which came into being early in the seventh century B. C., occupied a large area in south-central China; and while its southern boundaries have not been determined with any degree of accuracy, they seem to have included part of northern Hunan. The T'ang dynasty commentators on the *Shih chi*, for instance, indicate that the river Mi-lo 汨 和 in which the celebrated Ch'u poet Ch'ü Yüan 屈 原 drowned himself in the latter part of the fourth century B. C. was in the neighborhood of modern Ch'ang-sha before the *hsien* 縣 of that name was established in the Ch'in dynasty (57, ch. 84, 7a); and in the second century B. C. Ssǔ-ma Ch'ien 禹 墨 himself reports having visited the already famous site (op. cit., ch. 84, 14b) in the course of his extensive travels.

It is of interest, therefore, and entirely reasonable that this mirror of distinctly Shou-chou type should have been excavated almost 400 miles away at Ch'ang-sha, since both were within the confines of the great extra-Chinese state of Ch'u in about the third century B. C., when it was probably cast.

35.14 Mirror.

Patinated in mottled glossy black with areas of azurite. Decorated in sharply cast low relief.

Chou dynasty. Diameter 93/16 in. (.233 m.).

(J. A. P., 1944.) A mirror of the Shou-chou 壽 州 type. See note on 41.4 and the E category in Karlgren (26, pp. 80-89, pls. 39-50). The main zone of decoration consists of four dragon forms in low, flat relief. These are so highly stylized that only the four heads at the inner edge of the field are clearly recognizable; the bodies, legs, and tails are to a great extent dissolved into arabesques symmetrically disposed over the field. The dragons are separated from each other by four tear-drop-shaped figures with their points outward. The ground underlying this pattern consists of groups of spirals and triangles arranged in parallel lines.

This pattern appears again in the inner circle surrounding the knob-seat; and the two areas of similar ground pattern have in common a series of very thin raised lines crossing each other at right angles and at regular intervals. These lines are clearly not intended as part of the design for they sometimes disappear entirely; but they provide a clue to at least one part of the method by which these mirror designs were executed. They represent the lines of conjunction between contiguous impressions of a rectangular stamp which was used to fix the ground pattern on a master model from which the casting mold was made. The stamp used here was $1\frac{1}{32}$ in. x $1\frac{13}{32}$ in. in size, and had on it six rows of three spiral and six triangular elements each. The design is shown in the upper left panel of a series of eight typical ground patterns illustrated by Umehara (74, p. 23). The fact that the lines are in relief on the bronze point to the preliminary preparation of a model or positive of the proposed mirror, for had the stamp been applied to the material of the mold itself, the lines would have been in intaglio on the final product. It would seem that the first step was the preparation of a flat piece of some soft material, probably clay, of irregular shape on which a series of impressions were made with a carved or previously modeled stamp of the required design. The soft material was squeezed up slightly between impressions, producing these thin lines which then appeared in intaglio on the mold and in relief again on the mirror. The precision with which this step was executed appears to have varied to some extent, but the marks of the stamp are clearly visible on a large majority of pre-Han mirrors. On those where they are not visible some retouching may have taken place on the model; and in some instances the traces are hidden in the overlying patterns. It may be noted, too, that the marks are more often found on Shou-chou mirrors than on those of the Lo-yang group, perhaps as indication that greater finesse was demanded by the house of Chou, even in its declining years, than by the rulers of the barbarian state of Ch'u 楚 (cf. note on 41.1).

With the ground pattern prepared in this way, it may be assumed that a circle was described determining the size of the mirror (cf. Umehara, op. cit., p. 13, fig. 6), and the concentric bands of various designs and the knob-seat were applied leaving the basic pattern to show through the interstices. The detailed procedure in these further steps is still obscure, but one interesting suggestion may be noted with respect to the outer rim. It may be that this part of the mirror was executed last of all and with a mold consisting of a separate piece from that on which the main design was prepared. Karlbeck has called attention to two mirrors⁹ whose identity extends even to a crack in the original model which appears in the final bronze. In both cases the crack runs across the ground pattern and through the narrow inner rim but stops short there and does not appear on the broad concave outer rim, indicating that the model or mold for the latter was intact and was used in conjunction with a cracked model of the principal part of the mirror.

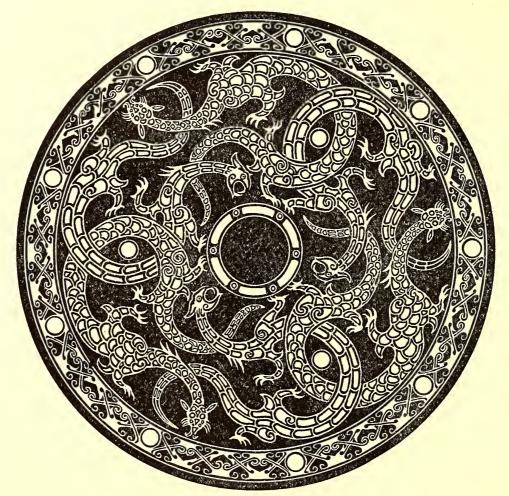
⁹ Conversation in Stockholm, August 1938. One of the mirrors is in the collection of the British Museum and apparently is unpublished. The other may be the one in the Lagrelius collection, Stockholm, published by Karlgren (26, pl. 11, C16), though it is hard to tell from the reproduction. If this is the one, it would seem that the Lagrelius mirror was cast first, and that the model cracked further before the mold for the British Museum example was made

36.3 Mirror.

Patinated in dull brown with areas of green and earthy incrustation. Decorated with gold and silver inlay.

Chou dynasty. Diameter $7\frac{1}{16}$ in. (.195 m.).

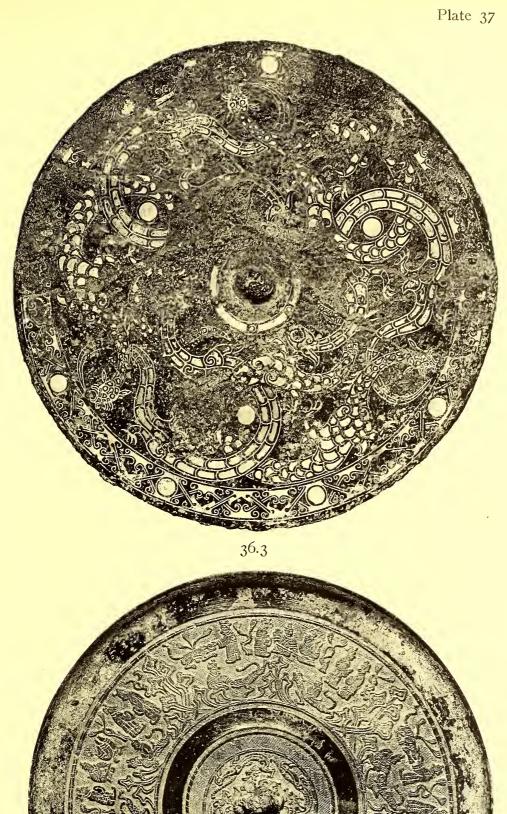
(J. A. P., 1944.) The reverse of the mirror is a single level surface with neither knob-seat nor rim raised above it. The small circular pattern surrounding the knob is of silver. In the main field of decoration are six fantastic beasts symmetrically intertwined, and representing two distinct types. Three have short, broad scales



Reverse of mirror.

of gold separated by threads of silver, and their golden feline heads face the outer rim. The other three have elongated silver scales separated by gold threads, and their birdlike heads of silver face the center. The outer band consists of one version of the volute and triangle pattern so characteristic of the period, and is executed in fine lines of silver and gold.

The mirror is made in two parts. The reverse, carrying the knob and the inlaid design, has a raised rim with beveled edge on its front side; and into the space thus





35.13



created the reflecting surface was carefully fitted. The reflector has been broken, and less than one-half remains in place, but this fact serves to show this construction the more clearly. The obverse is heavily incrusted with malachite and some azurite patination, and small mineralized fragments of silk adhere to the surface. The two-piece mirror was not uncommon in later times, and this method was used to make those so-called magic mirrors which reflect an image apparently not cast in relief on the back. They would, however, seem to be rare at this early date; and there is, at present, no indication of the reason this example was so made.

Umehara (78, pp. 32-33, pl. 49) publishes this mirror with the inference that it comes from the Han 韓 tombs at Chin-ts'un 金 村. This would date it sometime between 450 and 230 B. C. Actually, the author fails to give any evidence of this provenance, and the mirror does not appear in Bishop White's extensive repertory of objects purporting to come from that site (85). For a just evaluation of the merits and defects of these two publications, see Karlgren (28, pp. 65-67; the problem of dating these finds is discussed in the same work, pp. 74-81). Under the circumstances, neither the omission by Bishop White nor the inclusion by Umehara is of decisive importance. When the mirror is considered on the basis of its decoration, and by comparison with the Chin-ts'un finds as a whole, the fifth to third century B. C. date seems perfectly applicable whether it actually came from the tombs of the princes of Han or not.

35.13 Mirror.

Patinated in mottled glossy black and gray with malachite incrustations. Decorated in sharply cast low relief.

Han dynasty. Diameter 7¹/₄ in. (.184 m.).

(J. A. P., 1944.) This mirror is of the Shou-chou 壽州 type (cf. note on 41.1); it is unusual in that much of its decoration consists of human and animal figures in a suggested landscape setting. The main area is divided into four equal segments by four highly stylized groups of mountain peaks which rise from the inner border of the field almost to the outer. In each of the quadrants so created are eight humans and three animals; all four groups are identical. In the upper left, a standing man stretches out his left hand to pat the head of a tiger (?) lying in front of a tree. At the man's back is a tree, to the right of which stands another man in a respectful attitude facing a kneeling lute player. At the musician's left hand kneels another person with head tilted and hands upraised as though he were listening and keeping time to the music. To the right of this group is another tree beyond which stand two gentlemen in a conversational attitude. The left-hand figure stands slightly higher with head erect, while his companion, whose head is slightly inclined, stands at a lower level and may represent a person of lower rank. In three of the four sets of scenes there is a tree at this man's back. In the fourth it is missing. Beneath the feet of these persons are shown two further scenes. Seated on one of the lower boulders of the mountain mass at the left is a man who extends his left hand to pacify a leopardlike beast which plunges down from the small clump of rocks to the right (or has he thrust his hand into the beast's mouth?). Beyond this mass is a man calmly seated on the back of a tiger which appears to be leisurely stretching itself.

It is probable that these groups of human beings and animals represent well-known incidents in Taoist lore, though it is impossible to identify them with any degree of certainty. One group, however—that composed of a lute player and two other persons—strongly suggests the story of Po Ya 伯牙, his teacher Ch'êng Lien 成連, and his favorite listener Chung Tzǔ-ch'i 鍾子期. (Cf. 36.4 and 37.15.)

The knob is somewhat imperfectly cast but appears to represent the entwined tortoise and serpent, the Dark Warrior, *Hsüan-wu* 玄武, signifying the north. It rests on a quatrefoil in low relief and is surrounded by four dragons whose heads are turned backward and upside down. A ground pattern of fine parallel lines arranged in parallelograms with granulated borders underlies both the main and inner fields of decoration, but this is largely obscured by the superimposed figures. The appearance of parts of two circular or spiral elements in the ground pattern near one of the tigers at the rim is irregular.

The mirror has been published in three places. Umehara (74, pl. 30) apparently considers it pre-Han, though he draws attention (p. 32) to its stylistic similarity to Han stone reliefs and to the decorated materials of Han date excavated at Noin Ula in Mongolia. Karlgren (26, No. F17, pp. 92, 96–103, pl. 56) includes it in a category which, for cogent reasons, he places in the second century B. C. Janse (18, p. 180, pl. 57) includes it in a group of miscellaneous Huai-style objects without special comment.

Examination of various elements in the design of the mirror leads strongly to the conclusion that it is probably of early Han date, though it should be remembered that our present limited knowledge does not permit exact dating for the earliest appearance of any particular style. Tentatively then, the human figures in dignified attitudes and Chinese costume are more closely related to those of the later stone carvings at Wu Liang Tz'ǔ 武梁 祠 and Hsiao-t'ang Shan 孝堂山 than to the running and prancing scantily clad creatures on some presumably late Chou vessels and on Lo-yang mirrors of the third century B. C., though the latter are certainly demons and not Chinese gentlemen. Even more striking is the representation of mountains and rocks which is not unlike that found in relief on Han pottery and in such paintings as remain from Han and the next few centuries thereafter. The fact that the knob is in the form of the Dark Warrior is of particular interest in connection with the date. The association of the four quarters of space with the four symbolic creatures—the Dark Warrior 玄武, north; the Red Bird 朱 鳥, south; the Azure Dragon 青龍, east; and the White Tiger 白虎, west—though suggested in the Chou li and the Li chi 禮 記 (cf. Karlgren, 25, p. 26, and his references), both late Chou dynasty texts of uncertain date, but probably fourth or third century B. C. at the earliest, does not appear fully established until the second century B. C. with the publication of the Huai-nan-tzǔ 淮 南子. Furthermore, no actual representations of the subject are known before Han times, when they appear in great numbers (see, for example, No. 37.30). Not only are they depicted on the mirrors, but when these are inscribed, the text frequently refers to these animals and to their functions as cosmic symbols, for what we look upon as the decorative elements on the mirror backs, especially in the Han and later examples, were all rich in symbolic meaning to the Chinese who made and used

them. The Dark Warrior of the north and the Red Bird of the south are described as controlling respectively the Yin And the Yang (Karlgren, 25, p. 27, No. 89), the two basic forces whose harmonious interaction was considered to be at the very foundation of all existence. It is well known that the Yang stood for all that was bright, hot, dry, hard, active, and masculine, while the Yin represented their opposites, the dark, cool, damp, soft, passive, and feminine. In the absence of any confirming evidence, nothing definite can be said about the solitary presence of the Dark Warrior on this mirror. It is tempting to suggest, however, that with his relationship to the Yin clearly established, he is here given the central position on the nonreflecting, or dark or Yin side of the mirror, and is balanced by the brilliance of the reflecting surface which, when it gathers the heat and light of the sun, is the essence of Yang.

In advancing these tentative suggestions for both the date of the mirror and the symbolism of the knob, the fact that it is clearly of the Shou-chou type should be emphasized. As noted in connection with 41.1, Shou-chou, shortly after the middle of the second century B. C., was the capital of Liu An 劉 安, the prince of Huai-nan, who assembled at his court the leading Taoist philosophers of the day. It was, therefore, the very center of the kind of metaphysical speculation that produced the elaborate cosmic symbolism represented here; and it does not seem at all inappropriate that this mirror should spring from that time, that place, and that body of thought.

37.30 Mirror.

Patinated in glossy black with some areas of cloudy green on the face. Decorated with casting in relief.

Han dynasty. Diameter 55% in. (.143 m.).

(J. A. P., 1944.) The decoration on the reverse is characteristic of that on a large group of Han mirrors. The large, plain, hemispherical knob is seated in a square whose corners are filled with scrollwork in linear relief. Outside this, in the main field of decoration, are eight small conical bosses, and four sets of geometric figures resembling the Roman letters T, L, and V, all symmetrically disposed. The latter have provided the common name "TLV mirror" for the type. Between these are arranged four pairs of mythical beasts among which can be distinguished the four traditional directional symbols: the Dark Warrior of the north, the Red Bird of the south, the Azure Dragon of the east, and the White Tiger of the west. Outside this field is a band of comb-tooth pattern. Again outside this, and upon the surface of the broad, thick rim, is a band of saw-tooth pattern and one of flowing lines making up the so-called "cloud pattern."

Many of these TLV mirrors carry inscriptions, and a large number of them are dated in the reign of Wang Mang 王 莽 (A. D. 9–23). For a discussion of the probable dates of the type as a whole, see Karlgren (26, pp. 18–25, 113–114).

The TLV pattern, long a mystery to modern students, has in recent years been found to relate to the Chinese sundial. The question has been discussed, inter alia, by Karlbeck (58, pp. 27–30) and Yetts (91, pp. 116–165).

39.38 Mirror.

Patinated evenly in black. Decorated with casting in flat relief. Dedicatory inscription of 47 characters.

Han dynasty. Dated in correspondence with A. D. 174. Diameter 7³/₁₆ in. (.182 m.).

(J. E. L., 1940.) The inscription reads as follows:

益 漢 人刻 吾 造 平 大 無 西 長 富 亟 蜀 作 長 世 合 尙 年 未 子 得 淶 方 正 明 孫 光 白 明 黄 延 竟 丙 年買自廣午

which may be rendered:

"In the Hsi P'ing reign (of the later Han dynasty), in the 3d year (A. D. 174), the 1st moon, and on the ping wu day, I made a shining Shangfang mirror. From Kuang-han and Shu in the West I brought together



37.30



39.38



and refined the white and yellow (metal), and myself engraved it without stint. May you have splendor for generations. May he who buys (the mirror) have great riches. May you have descendants forever, length of years, increased longevity and happiness without end."

(J. A. P., 1944.) Mr. Lodge's study of this object was interrupted after he had translated the inscription, and he did not get the opportunity to conclude it. The following *chia chieh* 假借, usual in mirror inscriptions, occur in the text: 竟 for 鏡, 淶 for 鍊. 亟 for 極, 受 for 壽.

A rubbing of what is probably this same mirror is published by Lo Chên-yü (43, p. 1b). The diameter is the same, and the same minor flaws in the surface are apparent. The only uncertainty is in the relief decoration on the knob, and in this respect the rubbing is not clear. According to Lo, the mirror was then in the collection of a Mr. Ch'ien of Hsiang-yang 襄 陽 錢 氏. It had previously been published by Liu Hsin-yüan (39, ch. 15, pp. 6b-7a, b). In that case, however, the reproduction was not clearly printed, and it would seem that the rubbing presented to Liu by the owner was also blurred. The result is a discrepancy in the reading of two of the characters that has persisted since that time in the literature on mirrors. The twenty-fourth and twenty-fifth characters are read by Liu as 〇 刻. Lo (42, p. 15a), reads them as 自 利, and, in the presence of the mirror itself, we know this reading to be correct. Liu's erroneous reading has been perpetuated by Tomioka Kenzō (66, p. 65) and by Gotō Moriichi (15, p. 200). Umehara (76, p. 11) gives the inscription following Lo's correct reading but with question marks. He notes in the text that the two characters are unclear. Citing Tomioka, he says that while he follows Lo's interpretation, there is still some doubt. Finally, Karlgren (25, No. 210, pp. 64-65, 78) gives Lo's version of the text. He cites Tomioka and traces his error to Liu, evidently not realizing that all are talking about the same inscription. It is true, as he says, that the characters in Liu's reproduction are clearly 自 利, but he fails to note that the poor quality of the reproduction as a whole and the general clarity of the characters strongly suggest that the latter have been retouched in places, and that this is the probable source of the error.

The 1st month of the 3d year of the Hsi P'ing reign of the later Han dynasty began on February 20, A. D. 174, according to the Julian calendar. In that month, there was no ping wu 丙午 day as the text would seem to indicate; the first day of that name actually fell on the 3d day of the 2d month (March 23, Julian). Karlgren (op. cit., p. 48) points out that this is not uncommon, and cites the Lun hêng 論 衡, a text of the first century A. D., as authority for the fact that the ping wu day was considered particularly auspicious for the manufacture of mirrors. The cyclical character ping is associated in meaning with fire, and wu with noon and the midday sun. Hence the combination has magical properties appropriate to the sun-reflecting, heat-gathering character of mirrors.

36.4 Mirror.

Patinated in black with spots of green and some corrosion on the rim. Decorated with casting in high relief. Dedicatory inscription of 44 characters.

Han dynasty. Dated in correspondence with A. D. 202. Diameter 5¹/₄ in. (.134 m.).

(J. E. L., 1936.) The dedicatory inscription is in verse and reads as follows:

建 朱 白 周 吾 安 鳥 牙 克 七 玄 單 容 明 年 武 0 象 竟 造 白 琴 五 作 虎 黄 帝 涑 君 靑 天 宮 帝 龍 皇 三 宜 除 高 兇 商 官

"I made this shining mirror. In secret I refined the *kung* element (earth) and the three *shang* elements (metals).

All around I sculptured images; the Five Emperors, the Sovereign of Heaven,

Po Ya playing . . . the lute, the Yellow Emperor dispelling malevolent influences.

The Red Bird, the Dark Warrior, the White Tiger and the Azure Dragon.

Done in the 7th year of Chien An (A. D. 202). May your Lordship attain to high office."

In the course of this text, the following common substitutions occur: 竟 for 鏡; 涑 for 鍊 or 媡; 克 for 刻; 白 for 伯; 單 for 彈 t'an. One character I am unable to read, but the line makes sense without it. The phrase $ch\ddot{u}n$ i kao kuan, "May your Lordship attain to office" appears above, and again below, the central boss.

Mirrors of this type are not rare (cf., e. g., Tomioka, 66, pls. 11 and 32, and p. 62); but the type itself is unusual for this period (third century) in that the decoration is presented as a single perpendicular composition instead of a circular sequence. The 22 human and animal figures represented are symmetrically arranged in a number of compartments formed by meandering bars which seem to fulfill no other function (cf. 37.15). Of the 14 human figures, no more than 8—possibly only 7— purport to be named in the dedicatory inscription; of the 7 animal figures, 4 are named in the inscription; while to the one monster—a bird with 2 human heads—as also to the remaining human and animal figures, the inscription makes



36.4



37.14



no specific reference at all. Even among the figures named, however, less than half can be definitely identified with the figures represented.

The Five Emperors make up one of the two numerical categories between which the Chinese traditionally divide their legendary rulers: the other is that of the Three Sovereigns 三皇. The total number of rulers involved, however, may be greater or even less than the sum of the two categories, because each category has been differently constituted by different historians. Thus, for example, the Li chi 禮 記 (chap. 月 令) (36, vol. 27, pp. 249-310) lists the Five Emperors as T'ai Hao (Fu Hsi) 太昊 (伏羲), Yen Ti (Shên Nung) 炎帝 (神農), Huang Ti 黄帝, Shao Hao 少 昊, and Chuan Hsü 岩 頊, whereas the Shih chi (9, vol. 1, pp. 25-96) lists them as Huang Ti, Chuan Hsü, K'u 嚳, Yao 堯 and Shun 舜. Meanwhile, the Three Sovereigns are usually listed as T'ai Hao, Yen Ti, and Huang Ti; but the eighth-century historian Ssŭ-ma Chêng 司馬貞, in his Annals of the Three Sovereigns 三皇本 記, supplementing the Shih chi, lists them as T'ai Hao (Fu Hsi), Nü Kua 女媧, and Yen Ti (Shên Nung), thus completing the Shih chi list of legendary rulers without duplication in the case of Huang Ti (9, vol. 1, introduction, pp. ccxiv-ccxv; also pp. cxc-cxcii). He says, furthermore, that Yen Ti (Shên Nung) had "the body of a man and the head of a bull." On the next page, however, he calls attention to another and perhaps earlier tradition (9, vol. 1, pp. 13, 17ff.) that the Three Sovereigns were the "Sovereigns of Heaven" 天皇, of whom there were 12; the "Sovereigns of Earth" 地 皇, of whom there were 11; and the "Sovereigns of Man"人皇, of whom there were 9. Ssǔ-ma Chêng himself makes it quite clear as also does the Commentary on his text—that he was discussing three groups of sovereigns, each group consisting of a definite number of individuals; but it appears that both before and since his time this point has been otherwise understood. The crux of the matter seems to lie in the true meaning of the phrases 天皇,氏十二頭, and 人 皇 九 頭, which Ssǔ-ma Chêng uses in the sense that the number of the Sovereigns of Heaven was 12 persons (literally "12 head") and the number of the Sovereigns of Man was 9 persons (literally "9 head"), as is made evident by his subsequent reference to these groups as 兄弟十二人"12 brothers" and 兄弟九人 "9 brothers," respectively (9, vol. 1, pp. 18–19). On the other hand, Pelliot (52, pp. 455-456) prefers to translate 人 皇 九 頭 "l'Empereur de l'Homme, à neuf têtes" . . . "mot à mot 'les neuf têtes de l'Empereur de l'Homme,' " and supports his preference by quoting chapter and verse; he has, moreover, published (51) a bronze plaque of the Six Dynasties showing in perforated relief a dragonlike quadruped with multiple human heads labeled "Sovereign of Heaven."

Bearing these literary references in mind, and turning again to the mirror decoration, it will be noticed that the personage seated immediately east (i. e., to the right) of the central boss has a pair of horns, indicating that he may be intended to represent Yen Ti (Shên Nung), the second of the Five Emperors listed in the Li chi. Perhaps there is a chance, too, that the winged monster with 2 human heads (southwest of the central boss) may have been meant to suggest the 12-headed Sovereign of Heaven; perhaps, also, the term 天皇 may have been used here to designate the reigning Emperor (Hsien Ti 獻帝 A. D. 181-234), although, indeed, I do not know how old this use of the term may be. The person seated immediately

to the left of the upper vertical inscription seems to be Po Ya 伯牙 the lute player; one of the two figures seated on either side of him may be his teacher Ch'êng Lien 成 連; while the figure shown in profile at the extreme right of the same row seems to be Chung Tzǔ-ch'i 鍾子期, Po Ya's favorite listener (see 35.13 and 37.15, and Umehara, 80, vol. 4, pl. 95b, where the lute is better represented). Of the other personages, none can be even tentatively identified; but some of the animals are recognizable. Thus, northwest of the central boss is the Red Bird; southwest, the Dark Warrior in the form of a tortoise with, curiously enough, a human figure on its back; southeast, the White Tiger; due east, a dragon, and due west another dragon—one, no doubt, the Green Dragon; the other, probably, the Yellow Dragon. These animals symbolize the "Five Palaces" or regions of the sky (9, vol. 3, pp. 339ff.), respectively: south, north, west, east, and center. (Yetts, 92, vol. 2, pp. 33ff., has discussed this symbolism admirably and at length; also in 91, pp. 120ff.)

(J. A. P., 1944.) For further information on the Five Emperors and their significance on mirrors of this type, cf. Hall (16, pp. 16–23).

37.14 Mirror.

Patinated in dark olive green, bluish gray, and patches of light green. Earthy adhesions. Decorated with casting in relief.

Han, Wu, or Chin dynasty. Diameter 81/4 in. (.210 m.).

(J. A. P., 1944.) The smooth, almost hemispherical knob is surrounded by a slightly concave rim outside of which are 35 small conical bosses. The main field of decoration is divided into quarters by 4 large nipples of similar shape, each with its concave rim and surrounded by circles of 21, 22, 23, and 24 small conical bosses respectively. The pictorial part of the design is in sharply cast relief. On opposite sides of the knob are two covered two-wheeled carts; one, with a single passenger, is drawn by a team of seven horses, the other, with two passengers, has a team of six. In the quarter in front of the six-horse team is seated a single personage to whom eight kneeling demonlike creatures are making offerings or obeisance. Of these, the four on the right have beards while those on the left are beardless. Of the bearded group, the second from the bottom appears to be holding a cylindrical cuplike vessel on a two-legged stand. The central figure wears a three-pointed hat, or crown, and is distinguished by his prominent cheekbones, bushy eyebrows, moustache, and whiskers. Diametrically across the mirror is a seated figure flanked by two standing attendants on a smaller scale. The right-hand attendant holds a large bud-shaped object (a vessel?) on a two-legged stand; and behind the left-hand attendant stands a single one of the thin demonlike figures mentioned above. In the remaining space are two birds in outline, an unidentified beast near one of the bosses, and two parrots, one behind the top of each cart. Encircling the whole of this field are two thin lines in relief and a band of comb-tooth pattern. On the thick sloping rim is a band of highly stylized animal forms in low, flat relief. The reflecting face of the mirror is convex.

Many mirrors of this type have been published, the most extensive selection by Umehara (82) who groups his examples on the basis of reported finds in the Shao-hsing 紹興 region of Chekiang Province. They are often called Yüeh 越 mirrors, after the ancient name of that part of China. The 73 mirrors in this work

fall into 2 well-defined groups; 59 have the main field of decoration quartered by 4 large nipples as on the mirror here under discussion; 14 are treated otherwise. Of the latter group, one has five nipples of the same type, two are decorated in such a way that all the figures appear right side up at once as on our 36.4, and the rest have zones of semicircles and squares in relief projecting inward from the thick outer rim as on our 37.15. Of this entire group 12 mirrors carry dated inscriptions, and none of those are of the 4-nipple type. A rapid survey of other works including mirrors of Yüeh type seems to indicate that so far as is known none of the dated mirrors is decorated with four nipples quartering the principal field (Lo, 43; Tomioka, 66, 67; Gotō, 15; Umehara, 75, 76, 77; and Karlgren, 25). The latter, though not illustrated, gives texts and translations of many inscriptions from mirrors illustrated in the foregoing works. In spite of the fact that all the dated mirrors appear to be of the square-and-semicircle, the single-orientation, and other types than those with four nipples, there seems to be no reason not to include the latter type in the Yüeh group both in time and in place. It may be noted in passing that among the dated examples the reign names are most often those of late Eastern Han, Wu, Western Chin, and Eastern Chin, thus placing them for the most part in the late second, third, and early fourth centuries A. D. (cf. 7, where a few examples are noted).

The pictorial relief decoration on the Yüeh mirrors characteristically includes the figures of legendary personages, deities, genii, and fabulous and symbolic birds and animals. Not infrequently these are identified by characters appearing beside them or else in the main inscription, if there is one (cf. 36.4, 39.52). Among these perhaps the most often mentioned are Hsi Wang Mu 西 王 母, Tung Wang Kung 東 王 公, and the symbolic beasts of the four cardinal directions; but occasionally figures of a more historical nature appear (cf. 39.52), and there are some instances where these have particular local significance for the Yüeh region (cf., e. g., Yetts, 93, where the second of the two mirrors shows the King of Yüeh, his general and counsellor Fan Li 范 義, two of his ladies, the King of Wu, and The Loyal Minister Wu Tzǔ-hsü 忠 臣 伍 子 胥).

As there are no characters on the present mirror; the identification of the personages represented must remain tentative. There is, however, enough comparative material available to support the suggestion that the two principal figures are Hsi Wang Mu and Tung Wang Kung. In Umehara's repertory of Yüeh mirrors cited above (82), there are, on mirrors of this 4-boss type, 13 instances of figures labeled Hsi Wang Mu, and 14 labeled Tung Wang Kung, and in 4 cases (6, 16, 26, 61) the latter wears a 3-pointed crown like that on our mirror. The other main elements of the design—the covered carts drawn by teams of horses of varying numbers and the small demonlike figures—are common on these mirrors. The two parrots, however, are unusual. While birds of various kinds are often included, this particular species seems to be rare in mirror decoration. Whether or not they have any particular significance is uncertain, but it may be worth noting that pairs of such birds, incised in the clay, form one of the characteristic decorations on the Yüeh ceramic wares that come from the same region.

37.15 Mirror.

Patinated in black and gray with small, sparse areas of pale green. Decorated with casting in relief. Dedicatory inscription of 56 characters.

Han, Wu, or Chin dynasty. Diameter 55/16 in. (.135 m.).

(J. E. L., 1938.) The inscription in verse appears on the 14 squares, 4 characters to each square, and is as follows:

大 安 子 服百 定孫 者 身 刻 作 所 番 公 舉 明 昌 遂 為 卿 樂 舒 是 敬 衆 師 道從 奉 神 湅 不 富 萬 三 命 賢 見 窮 貴 良 容 疆商

"I made the shining mirror; in secret I refined the three *shang* elements (metals);

All around I sculptured without stopping (?); I suitably depicted the ten thousand regions.

May everyone be happy; may all divinities make their ways manifest; May the one who carries (this mirror) be a Noble or a Minister: I respectfully offer it to the wise and the good.

May your sons and grandsons be many and prosperous; may your clan be rich and famous;

May you be at peace in whatever you do; may the open road have no ending;

May there be great good fortune to come; may the (mirror's) maker live long."

In this text the following common substitutions occur: 竟 for 鏡, 騙 for 顎, perhaps 是 for 氏, 陽 for 祥. Regarding the character which I have read *chih* 祉, see Karlgren, 25, pp. 56–57; but my reading is surely not impossible—the radical, indeed, being obvious; while in treating 祉, "happiness," as a substitute for its homophone, 此, "to stop," I have done nothing that is not often done by the writers of these mirror inscriptions.

This zone of semicircles and squares characterizes a large class¹⁰ of mirrors which were made, for the most part, during the four centuries between A. D. 100 and 500. Many of them are dated (e. g., 66, pls. 28, 29, 33–40), and from the information thus afforded it is evident that the third century was the period of their

¹⁰ The Yüeh group. Cf. 37.14, pp. 76, 77. J. A. P.



37.15



39.52



most numerous production: certainly more of them have survived from that century than from any other. But apart from the alternate semicircles and squares, mirrors of this class, with relatively few exceptions (e. g., Tomioka, 66, pls. 76, 1; 81; 82, 1, 2, 3; 87, 1), resemble one another closely in general construction and in the subjects, arrangement, and execution of their decoration.

The condition of the present example is so nearly perfect that the rich, spirited, and beautifully wrought decorations can be seen as well now as when the mirror was made. Among the legendary personages and supernatural animals in the broad, inner zone, it is easy to recognize Po Ya 伯牙 (700 B. C. or somewhat later), a famous player on the lute (琴), (cf. 36.4 and 35.13) in the Ch'u 楚 state, here flanked on the right by his teacher, known as Ch'êng Lien 成連, and on the left by his favorite listener, Chung Tzŭ-ch'i 鍾 子 期. According to Lü shih ch'un ch'iu (46, ch. 14, p. 4b): "Po Ya played on the lute; Chung Tzŭ-ch'i listened to him. Now as (Po Ya) played, his earnest thought was of Mount T'ai. Chung Tzŭ-ch'i said: 'What skillful lute playing! How sublime! It is like Mount T'ai.' After a moment's interval, (Po Ya's) earnest thought was of surging waters. Chung Tzŭ-ch'i again said 'What skillful lute playing! How grand! It is like surging waters.' When Chung Tzŭ-ch'i died, Po Ya broke his lute, cut the strings, and never again in all his days played on a lute, believing that there was no listener left in the world for whom it would be worth while to play." Ch'êng Lien is said to have transported his pupil to the Isles of the Immortals 仙島 where Po Ya's technique was perfected. Chung Tzŭ-ch'i was a woodcutter by trade; his name is now used to denote a connoisseur of music. To the right and left of these three worthies is, respectively, one of the four auspicious animals; and beyond each of these again, in either direction, is a group of personages whom I cannot surely identify. Next comes the other pair of auspicious animals; and in between them a pair of smaller, dancing animals completes the circuit of this zone of decoration. Winding its way throughout the design is a zigzag made up of straight bars each of which terminates in a cluster of two or three spirals and thus joins the next bar end to end in at least one direction. Four of these bars are held, respectively, in the mouths of the four large animals, and the whole arrangement—common enough among mirrors of this type—appears to serve merely as a means of dividing the decoration into four more or less symmetrical sections. Functionally, therefore, this zigzag seems to be comparable with the more elaborate device by which the decoration on mirrors like our 36.4 is divided into compartments. Excepting the four large animals, all the principal figures in the design are above the bars of the zigzag; but below them are a pair of fishes, a tortoise, three birds, and an unidentifiable quadruped. Very likely the fishes, then as now, symbolized union, marriage, fecundity, etc.: at all events, Lo Chên-yü (42, p. 12a, 1. 10) has published a mirror inscription in which a fish (or fishes) characterized as "divine" (神 魚) is mentioned among other animals depicted on the mirror; but since there is no illustration, it is impossible to tell how many fishes are shown (cf. 39.52). The tortoise and one of the birds may, of course, be the familiar Dark Warrior and Red Bird (cf. 36.4) commonly mentioned in mirror inscriptions; but I cannot be sure. The stream of fabulous animals, birds, and sprites racing clockwise around the narrower outer zone of decoration is particularly spirited.

39.52 Mirror.

Patinated in black, gray, and green with earthy incrustations. Decorated with casting in relief. Dedicatory inscription of 43 characters; identifying characters interspersed in decoration.

Han, Wu, or Chin dynasty. Diameter 67/8 in. (.175 m.).

(J. E. L., 1940.) The dedicatory inscription is in verse and reads as follows:

田 長 風 胡 3 保 雨 賀 氏 虜 後 時 殄 國 作 親 節 威 樂 得 天 五, 天 穀 下 民 夷 力孰復息服 函 分

"Mr. T'ien made this mirror. The barbarians of the four quarters have submitted:

Our Country is to be warmly congratulated; the people are at rest. The Hu slaves are rooted out and exterminated; the Empire is restored.

Wind and rain are seasonable and moderate; the five grains are ripening.

May both parents be long preserved; may they receive strength from Heaven;

May (the mirror) be handed down to inform future generations; may there be joy without end!"

In the course of this text, the following common substitutions occur: 竟 for 鏡, 威 for 滅, 孰 for 熟, 亟 for 極.

Practically every phrase in the foregoing is a formula, and mirror inscriptions composed of these formulae—with occasional additions or subtractions—are of frequent occurrence. In such inscriptions, many of the set phrases are mere generalities; others are somewhat vaguely or only potentially historical; while in a few cases accurate dates are added. The generalities require little comment; but it is, perhaps, worth noting that the phrases "Wind and rain are seasonable and moderate; the five grains are ripening" occur in the *Huai-nan-tzǔ* 淮 南 子, ch. 6 (according to Karlgren, **25**, p. 38). The two accurately dated inscriptions of this sort known to me have been published by (a) Umehara (**76**, p. 43) and (b) the 1st Supplement to it (p. 465 and pl. 2, 1); both are dated in the 3d year of the T'ai K'ang 太 康 reign

of the Western Chin dynasty, i. e., A. D. 282. In addition, a good many closely similar mirror inscriptions have been published as follows:

- (c). Umehara, **82**, Nos. 15, 16, 20, 25, 34, 40, 49, 59.
- (d). Umehara, 75, p. 179.
- (e). Tomioka, 67, pl. 28.
- (f). Tomioka, 66, p. 18 and pl. 2, 5; p. 20 and pl. 2, 1.
- (g). Ch'ien Tien, 11, pp. 8-9.
- (h). 14, vol. 6, pp. 20b, 21a, 23b, 27a-b.
- (i). Lo Chên-yü, **42**, p. 11a-b.
- (j). Lo Chên-yü, 43, ch. 2, pp. 21a, 22b.
- (k). **84**, ch. 28, p. 32; ch. 29, p. 6.
- (l). Umehara, 77, pl. 46, 2.
- (m). Lo Chên-yü, 43, ch. 2, pp. 17b and 20b.
- (n). Yetts, 92, vol. 2, pl. 13, B. 23, and pp. 55-56.
- (o). Our number 11.98.
- (p). Umehara, 77, p. 13 and pl. 22.
- (q). Umehara, 80, vol. 5, pl. 61.
- (r). Tomioka, **66**, p. 41 and pl. 3 (see (s)).
- (s). **14**, vol. 6, p. 40a.
- (t). Lo Chên-yü, 43, ch. 2, p. 23a (same mirror as (q) and (b)).

Every one of these inscriptions contains four phrases of like import which are either potentially or actually historical, and the above references, (c) through (t), have been arranged in that order. Thus, the historicity of all the crucial phrases in (c) through (k), and (l) through (o), is no more than potential, while in (p) through (t), one phrase—the same one in each case—is actually historical though not precisely so. Many of these inscriptions begin with the name of the maker of the mirror, and it is obvious that if this individual could be identified, the date of the mirror could be approximately fixed. Furthermore, the two phrases "The barbarians of the four quarters have submitted" and "The Hu slaves are rooted out and exterminated" can hardly have much chronological significance in themselves, since the Chinese were forever at more or less violent odds with their "barbarian" neighbors. If, however, one of the other two phrases should give some suggestion of a date, then the two just quoted may tend to confirm it or even to fix it more exactly. This possibility is illustrated by one of the three variations which appear in the fourth and last of the crucial phrases in which the maker of the mirror congratulates either "our Country" (國家, (a) through (k)), or "our Prince's House'' (君家, (1) through (o)), or "the New Dynasty" (新家, (p) through (t)). The expressions "our Country" and "our Prince's House" convey, as far as I can tell, no definite historical implication; but "the New Dynasty" doubtless means the turbulent reign of the so-called usurper Wang Mang 王 莾 (33 B. C.-A. D. 23), who (A. D. 9) proclaimed himself "New Emperor" 新皇帝 of the New Dynasty he hoped to found. With his sweeping reorganization of the Empire's agriculture, currency, and commerce—price-fixing, government loans, "ever-normal

granary," etc.—the policies of our own "New Deal" have much in common. That his ruthless prosecution of these reforms finally cost Wang Mang his head is, perhaps, beside the point. Absit omen! History credits him with the immediate abolition of slavery—a laudable accomplishment if, indeed, the fate of the Hu slaves, as described in these mirror inscriptions, does not indicate his preferred method of bringing it to pass. Early in his reign, too, he waged successful war upon "the barbarians of the four quarters" who "submitted" at the time, but later retaliated, in the days of his failing power, and contributed importantly to his downfall. On this evidence, therefore, it seems reasonable to assign New Dynasty mirror inscriptions of this type to the first few years of Wang Mang's reign. Thus, if the dates approximately or exactly fixed by (p)-(t) and (a)-(b) be regarded as terminal, it would appear that the respective dates of the whole series, (a)-(t), must fall between A. D. 9 and 282—a span of 273 years which included the last two reigns of Western Han, the whole of Eastern Han, the Three Kingdoms (Minor Han, Former Wei, and Eastern Wu), and the first reign of Western Chin. At all events, I have not yet found another example of the inscription which can be surely dated either earlier or later.

Although it can hardly be said that this inscription was ever preferably associated with any special type of mirror decoration, nevertheless it is true that a majority of the surviving mirrors which bear it are decorated with central designs executed in massive relief—either somewhat flattened, like our 37.14, or high and fully rounded, like our present example. On the other hand, some—though not all—of the New Dynasty examples, e. g., (p), (r), and (t), are of the so-called TLV type, with central designs executed in linear relief, like our 17.194; but there is no later example of this type in the series. Current throughout the whole group, however, are the designs executed in high, fully rounded relief, while those executed in somewhat flattened relief seem (cf. (c)) to have been more or less confined to the period of the Three Kingdoms, although this latter deduction may be based upon nothing more substantial than the chances and vagaries of survival. At all events, most of the designs executed in massive relief are devoted to mythological and legendary subjects, such as fabulous creatures or Hsi Wang Mu 西王母 and Tung Wang Kung 東王公, etc.; but there are at least three of the series on which historical subjects have been illustrated, two of them—(c) No. 49 and (g)—in flattened relief and one—our present example—in high, rounded relief.

For example, the subject of (c) No. 49 is taken from the life of Wu Yüan 伍員 of Ch'u 楚, better known as the "loyal Minister" Wu Tzǔ-hsü 忠臣 伍子胥 (sixth-fifth century B. C.). He is here shown in attendance while Prince Ho Lü 闔閭 of Wu publicly flogs the corpse of Prince P'ing 平 of Ch'u who had unjustly put Wu's father and elder brother to death. The subject of (g), curiously enough, is almost a continuation of this story, for it shows Ho Lü's son and successor, Prince Fu Ch'ai 夫 差 of Wu, who, contrary to the advice of his ever loyal Minister Wu Tzǔ-hsü, received with open arms the famous beauty Hsi Shih 西施 when she arrived at his Court through the machinations of Fan Li 范蠡, Minister of Kou Chien 勾踐, Prince of Yüeh 越, and was so debauched by her and so distracted from affairs of state that his loyal Minister committed suicide and his army fell an easy prey to

the invading forces of Yüeh. Why the mirror bearing this design should have been published as, in effect, "a T'ang imitation of a Han original," I cannot tell from the outline reproduction; but I think its close relationship to (c) No. 49 in subject and technique provides good reason for believing that the two mirrors are closely related also in date—probably Three Kingdoms. Our own example, however, is different in technique and subject and is, perhaps, a little later in date.

The historical part of the decoration is identifiable chiefly by means of the labels which accompany some of the figures, and appears to deal with the imprisonment of Wên Wang 文王, virtual founder of the Chou dynasty, by Chou Hsin 紂辛, last Emperor of the Shang dynasty, to whom Wên was betrayed by Hu 虎, Marquis of Ch'ung 崇. At that time, Wên was known as Hsi Po 西伯, "Chief of the West,"11 and is described as a man of exemplary virtue and beneficence. His enforced detention in Yu-li 羑里 lasted for 7 years, and during that period he is said to have added the hexagrams to the trigrams of the *I ching* 易經. He owed his release from durance vile to the loyalty and acumen of his adherents San I-shêng 散 宜 生, Hung Yao 閎夭, and Chiang Tzǔ-ya 姜子牙, better known as Lü Shang 呂尚 or T'ai Kung Wang 太公望 (cf. our painting 11.296), who collected a large number of "marvelous things"—including nine quadrigae, dappled horses 文 馬, and a beautiful daughter of the princely house of Hsin 莘—all of which, through the instrumentality of a Court favorite named Fei Chung 費 仲, they presented to Chou Hsin. Greatly delighted—especially by the lovely lady—the Emperor at once pardoned the Chief of the West, made him a handsome present of weapons, and restored him to favor. This story is told at length in chapters 3, 4, and 32 of the Shih chi (9, vol. 1, pp. 202 and 218-222; vol. 4, p. 36; see also Legge, 35, vol. 3, pt. 1, p. 270; and vol. 5, pt. 2, p. 562, lines 14–15, and p. 567).

As illustrated on our mirror, the scene occupies the whole of the middle zone of decoration. This zone is divided into three nearly equal segments by representations of buildings; but the scene itself seems to be continuous. Immediately to the left of the largest of the buildings are two women standing in respectful attitudes; each of them is labeled ch'ing i 青 衣, literally "blue robe," a term meaning, in this case, something like "waiting-woman." They are evidently in attendance on the personage seated in front of them, who is possibly Ta Chi 妲己, the notorious concubine of Chou Hsin, or possibly the beautiful lady procured for that monarch on behalf of the Chief of the West. Next to her is an open stall (cf. (g)) in which is seated another personage; and just beyond the upper left-hand corner of the stall is a label which, I think, reads "King Chou" 紂 王, indicating that the occupant of the stall is Chou Hsin himself. His proper name, it has been said, was Shou 受, and, indeed, it is by this name (i. e., "Shou, King of Shang" 商 王 受) that he is called in the Shu ching (35, vol. 3, pt. 2, p. 284, text and note 4); but the Shih chi refers to him as Emperor (帝) and calls him Hsin 辛, his personal name, or Chou 紂, meaning "cruel," an epithet applied to him by "the whole Empire" (天下謂之紂) because of his wickedness. This segment of the scene is completed by a gesticulating man who may, perhaps, be the go-between Fei Chung, and next to him stands another building. To the left of it is an armed man labeled Huang-mên chi 黄門即

¹¹ Cf. 35.21-35.22, p. 53.

"Here is a courtier"; next, another armed man labeled Yü-lin chi 初 林 即"Here is a palace guard"; and on the ground to the left of him is a dome-shaped cage containing, perhaps, a bird. What this cage signifies, I do not know. Above it, anyway, is a label of three characters, "King Wên of Chou" 周文王 (the posthumous name and title of the Chief of the West), identifying the next figure to the left which is that of a seated man apparently clasping to his breast with both hands a rectangular object. Possibly this object may be intended to represent the *I ching*, on which King Wên is said to have worked during his captivity; but to me it also looks as though it might be a frame used to fetter the prisoner's hands. Around his neck is a scarf, the free end of which is held by an armed man standing behind him, and behind this man, again, are two unarmed men in attitudes of respect. The second of these is labeled yang shu 陽 書, an expression which, as it stands, makes no sense. The man in front of him is labeled yang 陽 and a character which may be meant for shu 書, though it has an extra stroke at the top. Below this is the character hu 虎, "tiger," which may serve here to identify the armed man guarding the captive King as Hu, Marquis of Ch'ung, who had betrayed Wên to the Emperor. Under this, and in smaller script, are the words wên chi 媽 即, "Here is a dappled horse," referring, no doubt, to the horse shown in the next segment of the scene. The Shuo wên defines 媽 as "a horse with a red mane, striped body, and eyes like gold," and says that in the time of King Wên (or, according to one editor, King Ch'êng 成) such horses were brought as gifts by the Dog Jung 犬 戎 barbarians, and were also included among the presents "offered to Chou # by the Chief of the West." These statements are confirmed by the Shih chi (9, vol. 1, p. 218) which, however, writes 文馬 instead of 媽, and says that the animals came from the country of the Li Jung 驪 戎.

To the left of the last and smallest of the buildings, there is a bird, and below it a big dog held in leash by an armed man who holds also the halter of a saddled horse behind him which is eating grain out of a large basket. Behind the horse is another bird and a grazing water buffalo, and behind the latter is a two-wheeled covered cart and still another bird. There are also seven embossed dots—one above the horse, one below the dog's tail, and five in a row below its fore paws. Constellations are sometimes represented in this way on mirror backs; but such an explanation of the dots seems hardly to apply in this case. Nor can I explain the three birds, although it is possible that dots and birds alike are merely space fillers put in to thicken this segment of the design. The dog may be intended to identify the Dog Jung barbarians, who were supposed to be descended from and ruled by a dog; but since Chou ‡‡, according to the Shih chi (9, vol. 1, p. 200), was an ardent collector of dogs, the one shown here may be part of the gift offered by the Chief of the West. The horse, no doubt, is the striped or dappled animal heralded by the label in the preceding segment.

The inner zone of decoration in high relief exhibits four large animals, a smaller dancing animal, and three posturing human figures. The narrow, outer zone of countersunk reliefs exhibits a bird, a charging water buffalo, a fish, a tiger, and other animals, as well as trailing plant forms. I am unable, however, to explain the symbolism of these designs, though they are common enough on mirror backs.

Their general character is, of course, auspicious, and it is quite possible that the bird and tiger are the familiar Red Bird and White Tiger (see 36.4; regarding the fish, cf. 37.15).

(J. A. P., 1944.) W. P. Yetts has published (93) a mirror in the collection of Mrs. Walter Sedgwick, of London, that has interesting similarities with this. Except for the maker's name, the characters of the inscription are identical, with the thirty-sixth and thirty-seventh used in inverted order. The personages depicted are Wu Tzŭ-hsü 伍子肯, Fan Li 范蠡, and others concerned in one of the legends discussed above.

32.14 Terminal ornament in the form of a dragon head.

Deep socket with square cotter hole for attachment to the end of a chariot pole. Bronze overlaid with gold foil engraved with curvilinear designs somewhat obscured by patination. Teeth and eyeballs overlaid with silver foil; glass pupils.

Chou dynasty, state of Han 韓. Length 10½ in. (.255 m.).

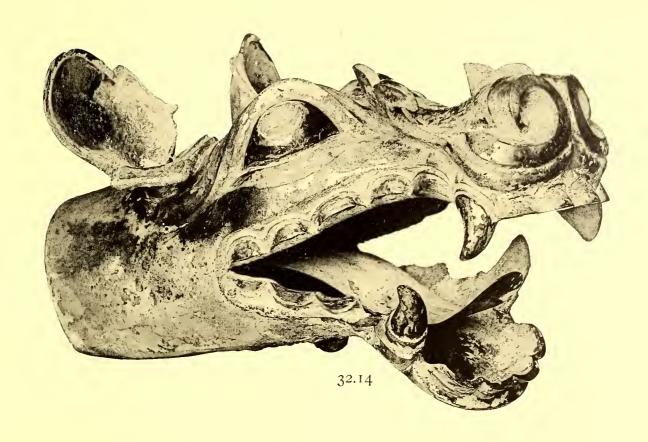
(J. E. L., 1932.) The skull and lower jaw seem to be a single casting, but the carefully modeled hard palate and the tongue were separately made. This may be true of the ears also, although there is no conclusive indication that it is. The auditory canals, anyway, like the nostrils, penetrate to the head cavity. Two rectangular shoulders and a small stud near the lower margin of the socket, as well, probably, as the transverse rectangular opening in the palate, were connected, no doubt, with the mounting of the head on a chariot pole. The small loop under the chin may well have served for the suspension of a tassel. The glass of the eye pupils seems to be Arabic or Syrian or Phoenician rather than Chinese; they are, perhaps, the two halves of a single large bead.

The slender, geometrical patterns delicately engraved in the gold foil are not very effective even near to, and, indeed, can hardly be seen at a distance. They appear, however, on almost all surfaces, not excepting the margins of the nostrils, the roof of the mouth, the underside of the tongue, etc. The incrustation of bronze patina must have come chiefly from inside the head. Wherever I have removed bits of it, the gold and silver foils beneath are quite intact. The nick in either ear, and the scar on the neck behind the left ear, are recent.

(J. A. P., 1944.) This object is one of those published by Bishop White (85, p. 59, No. 002) purporting to come from the Han 韓 tombs at Chin-ts'un 金 村 in Honan, and thus may be dated, with a fair degree of probability, sometime between 450 and 230 B. C. (cf. 36.3). It has also been published by Umehara in four separate works (80, pt. 3, vol. 1, pl. 51; 72, pl. 2; 78, pl. 51; 81, pl. 85). According to Bishop White it comes from one of the horse pits and not from an actual tomb. These pits, it appears, were dug near the entrance of the tomb; and here the chariots and horses used in the funeral procession were buried after the coffin had been carried into the tomb (op. cit., p. 34, and plan facing p. 16). Horse bones and chariot fittings were the only things found in the pits, while the tombs themselves yielded no similar materials.

The above note about the probable Arabic, Syrian, or Phoenician origin of the glass eyes was written when, for want of reliable evidence to the contrary, it was assumed that glass was not produced in China earlier than about the fifth century A. D. Since that time, considerable study has been devoted to the subject; and in 1938 C. G. Seligman and H. C. Beck published (56) apparently conclusive evidence of the manufacture of glass in China in pre-Han times. Their investigations involved the spectrographic analysis of numerous specimens from various parts of Asia, and among the Chinese examples were a number of beads from the same Chin-ts'un site which presumably yielded this dragon head. One of the interesting points brought to light was that Chinese glass of Han or pre-Han date contains barium in measura-

Plate 41





32.15



ble amounts, while in T'ang and later glass, and glass from Central Asia, the Near East, and the West only occasional traces of that element are present. It is, of course, impossible to state the origin of the dragon's eyes without spectrographic analysis of their content; but, in the light of this new information, it is perfectly possible that they may be Chinese.

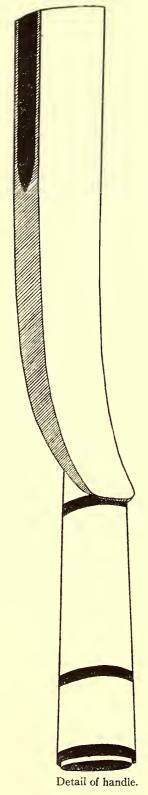
32.15-32.16 Pair of terminal chocks (one illustrated).

All but the under and bearing surfaces decorated with designs inlaid with gold and silver somewhat obscured by patination and accretions due to burial.

Chou dynasty, state of Han 韓. 32.15, length 10½ in. (.256 m.); 32.16, length 10½ in. (.255 m.).

- (J. E. L., 1932.) In both cases the channel for a strap or rope is formed by the open jaws of a mammalian head, the lower jaw being greatly elongated upward in a scotia curve and attenuated to end in a snake head. The mammalian head and neck are hollow and serve as the socket; the elongated lower jaw is solid; but the whole thing seems to be a single casting. The socket of 32.16 contains the remains of, presumably, the wooden chariot member to which the chock was attached.
- (J. A. P., 1944.) A pair of similar objects in the Sung imperial collection is published in the catalogue (83, ch. 27, pp. 32–33) as being carriage ornaments. The text, discussing the carriages of the ancients, goes on to say that the holder of the carriage pole is shaped like a claw; and that this thing is made in the form of a p^ii hsieh tun fu 時 邪 瞭 伏, a crouching p^ii hsieh (a fabulous animal) with a repeated ornament consisting of a dragon and serpent. Its round aperture can contain a cross beam, and it is called a carriage-pole support. While this description is somewhat lacking in detail, and the authority of a twelfth-century writer discussing the functions of late Chou vehicles is certainly not above suspicion, it is at least suggestive. Can it be that this object was fixed on a short stick, and that the bronze chock received and supported the carriage pole when the horses were unhitched?

The wood has been identified by W. N. Watkins, of the Division of Woods and Wood Technology of the Smithsonian Institution, as *Melia azedarach*, Linn. This tree, which grows to a height of 30 or 40 feet or more, is commonly known as chinaberry, China tree, or Pride of India. Its Chinese name is *Lien* 棟, or, commonly, Golden Bell 金 鈴子.



40.10 Ceremonial sickle.

Blade of brown jade set in a haft of bronze inlaid with turquoise.

Shang dynasty. Height 13% in. (.345 m.) over all.

(J. A. P., 1944.) The object consists of four separate parts: a jade blade, a bronze haft, a cap on top of the latter, and a butt below. The blade is set into a socket at the upper end of the haft; and as there is no evidence that a pin was used, it must originally have been secured by some adhesive material like cement. The elaborate projection opposite the blade is an integral part of the haft. Though it has no such practical function as the nei 內 found on weapons of the ko type (cf. 41.5, p. 89), its strong resemblance to that member may perhaps serve as evidence that the two types of implements were related. The present assembly of the haft, blade, and cap probably simulates the original appearance of the object because it is the way the pieces fit together. It seems likely, however, that a wooden grip, perhaps about 5 inches long, was placed between the lower end of the haft and the butt.

The bronze parts are all richly inlaid with turquoise in designs characteristic of Shang and early Chou times. The jade blade is decorated with dragons in incised linear relief, its curving top is deeply notched, and the cutting edge is ground sharp. The elaborate quality of the decoration and the unstable fastening of the blade leave no doubt that the object was used for ceremonial rather than practical purposes.

Although its exact use remains unknown, the curious shape of the handle suggests the way in which it must have been held and leads to its designation as a sickle. The drawing shows a three-quarter view of the handle, with the blade, cap, and butt removed. The upper part is rectangular in section with a marked lateral curve toward the lower end; and the actual grip, projecting down from the outside of the curve, is round. From this it would seem that it was probably held in a horizontal position, in the right hand of the user, and operated with a lateral wrist motion, cutting from right to left, much as a sickle is used in cutting grass today.







41.4

41.5

41.5 Ceremonial blade of the type ko.

Blade of gray and white jade mounted in bronze inlaid with turquoise. Bronze surfaces heavily incrusted with malachite.

Shang dynasty. Length 16½ in. (.419 m.) over all.

(J. A. P., 1944.) A number of similar weapons, purporting to come from Anyang have been published by Umehara (71, pls. 33–36), and it is quite possible that this example came from that site.

Of the several types of ancient Chinese weapons known today, the ko is the most common and consequently has been most frequently described (92, vol. 1, pp. 65-66; 91, pp. 95-104; and 58, pp. 17-20). In Western publications it has most often been called dagger-axe, halberd, or hache poignard, though none of these terms fits precisely. The type existed in stone in Neolithic times and continued in bronze in gradually changing form (2, pp. 45-47). The principal parts of the ko are the yüan 援, or main blade, the nei 內, or tang projecting backward which was inserted through a hole in the haft, and the hu \mathfrak{H} , or down-curving member below the yüan. The latter was provided with a narrow flange which fitted into a vertical slot in the haft to strengthen the joint, and one or more holes through which passed a thong to bind the head and haft together. In many cases there is a hole through the *nei* into which a peg could be driven for the same purpose. Variations occur in the relative proportions of the three parts, principally in the length of the hu; and while no absolute dating can be based on form, the relative chronology has been tentatively established, and this member gradually developed and was extended for practical reasons. Examples with as many as seven holes are known.

Related to the ko is a weapon called the $ch\ddot{u}$ 程 to which the haft was attached by inserting it through a tubular process immediately behind the $y\ddot{u}an$. Extending behind this tube is a vestigial nei whose function was perhaps to improve the balance of the weapon, or, when sharpened, to provide a short chopping blade as was sometimes done on the true ko as well.

In what appear to be later examples of the ko, those with very long hu, the angle between $y\ddot{u}an$ and hu is often greatly increased so that the $y\ddot{u}an$ points upward as much as 45° above the horizontal (86, pls. 39, 40, 41, 66, 67). This tendency ultimately led to the development of a weapon called chi 戟 in which the $y\ddot{u}an$ and the hu formed a continuous vertical blade, and the nei performed its usual function of fitting through the haft. A series of examples illustrating this development is in the collections of the Museum of Far Eastern Antiquities in Stockholm but has not been published. The chi occurs in late Chou and Han times (10, figs. 47, 48, etc.) and appears to have superseded the ko about that date.

41.4 Ceremonial implement.

Blade of gray-brown and white jade mounted in bronze inlaid with turquoise. Socketed for vertical hafting; bronze surfaces incrusted with malachite.

Shang dynasty. Length 83/8 in. (.213 m.) over all.

(J. E. L., 1941.) Published examples of blades mounted for vertical hafting, and made of these materials, are lanceolate in form (70, pl. 25; and 71, pl. 38); and it is difficult to determine whether a square blade like this is derived from a weapon or some other sort of implement. At all events, the type must be rare. Adhering to one side of the blade is an irregular piece of what appears to be gesso on which are the remains of a design painted in red.

39.39-39.40 Pair of ceremonial blades of the type ko.

Decorated with turquoise inlay. Bronze areas incrusted with malachite.

Shang dynasty. 39.39, length $15\frac{1}{2}$ in. (.393 m.); 39.40, length $15\frac{7}{16}$ in. (.391 m.).

(J. A. P., 1944.) These ko are of presumably early form, lacking the hu (cf. 41.5). The two processes extending upward and downward at the back of the yüan provide the only means for binding to the haft with a thong, and the hole in the nei probably received a pin to strengthen the joint.

At the back of the *nei* on each side is an area inlaid with small bits of turquoise arranged to form a small dragon with horn, snout, and curled tail, a type frequently occurring on Shang bronzes. Further inlay of the same material appears in a raised area on each side of the *yüan*. The back end of this, when the blade is held point down, roughly suggests the *t'ao-t'ieh*, and the long, narrow part has a geometric pattern.

The care taken with the inlay and the thinness of the objects as a whole indicate that they were made for ceremonial purposes rather than as functional weapons.

These objects have been published by Umehara (71, pl. 37) and purport to have been found at An-yang.





34.3 Blade of the type tao.

Socketed for hafting. Decorated with casting in relief. Incrusted with malachite, some azurite; areas of unaltered metal.

Chou dynasty. Height 13\% in. (.335 m.); weight 2 lb. 14 oz.

(J. E. L., 1935.) The group of 12 weapons (34.3–34.14¹²), of which this is one, was bought as a collection, and with it came a statement in Chinese which may be translated as follows:

"Twelve bronze weapons of the Chou dynasty. In the 6th moon of the 20th year of the Republic of China (1931) a native dug up in Wei-hui-fu, Honan Province, not far from An-yang District, a group of ancient weapons, namely: six halberds (ko 戈), one lance (mou 矛), two hatchets (fu 斧), and three knives (tao 刀). On one of the knives are the two characters K'ang Hou 康侯 (Marquis K'ang). K'ang-shu was a younger brother of King Ch'êng of Choul²a, and his appanage included what are now An-yang District and Wei-hui Prefecture. These 12 weapons are undoubtedly relics of the Chou Marquis K'ang. Among them is a Ch'ih-yu 蚩尤 knife, a circular knife, an ox-head halberd, and a halberd inlaid with shell. Antiquities so remarkable in form and make have not been seen hitherto. By students of the manners and customs of ancient Chou, they must be regarded as great treasures. Recorded by Ch'u Tê-i 褚德彝. The 11th day of the 10th moon of the 20th year of the Republic of China (1931)."

Ch'u Tê-i is said to have been associated in some capacity with the famous collections gathered and published by the late Tuan Fang 端 In any case, his record of these weapons is at present our only available information as to where and when they were found, and there is no apparent reason to doubt its essential accuracy. Just how Ch'u groups the weapons as ko, mou, and fu is not clear in every case; but those he describes as "a Ch'ih-yu knife" (34.3), "a circular knife" (34.4), "an ox-head halberd" (34.7), "a halberd inlaid with shell" (34.8), 'are all easily identifiable.

(J. A. P., 1944.) 34.3 has a loop handle at the back, and a tubular socket runs from the base of the blade to the upper joint of the handle. The principal relief design is on the surface of this tube. At the base, facing downward, is a feline head with gaping jaws and four large tusks. Seated on the back of this head is a semihuman figure. The legs end in birdlike feet with three claws; and between the first and second of these is a round hole which may have received a pin to secure the haft. The open mouth of the figure has a long pendulous lower lip and large tusks whose occlusion is such that the upper tusks come inside the lower. Markings on the cheek suggest tattooing, a practice attributed by the Chinese to barbarian peoples. The top of the head is clutched in the jaws of a dragon whose body is formed by the handle with its scale pattern. Above this is a knife-shaped pattern following the curve of the blade itself. The wavy edge of the blade is like that of a

¹² Because of its extremely fragmentary condition 34.14 is without value as a document and is not included in this publication.

¹²a The writer of this statement is in error as K'ang-shu was a younger brother of King Wu (Wu Wang) and therefore an uncle of King Ch'êng (Ch'êng Wang).

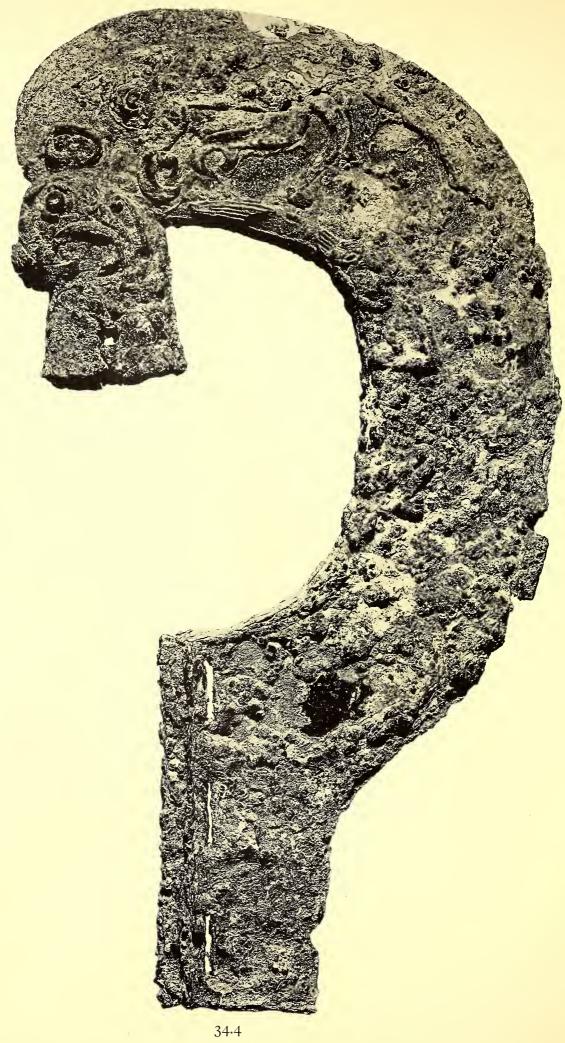
bread knife and has been cast with a bevel of about $\frac{3}{16}$ in. of which less than $\frac{1}{16}$ has been coarsely ground or filed. The back of the socket, below the handle, has three apertures, one of which has been filled with a plasterlike substance.

The representation of a dragon or some other monster holding an anthropomorphic head in its mouth is well known on Chou dynasty objects, executed in both bronze and jade. While there need be no doubt that this had a definite meaning for the ancient Chinese who made and used these objects, such meaning is not known today. Various suggestions have been advanced: that the dragon is acting as a protector, that the scene symbolizes some aspect of the eternal struggle between darkness and light, that it has a lunar symbolism, etc.; and while the truth may lie in one of these directions, no conclusive evidence has yet been found.

The term "Ch'ih-yu knife" used by Ch'u Tê-i refers to a certain Ch'ih-yu, one of the unruly lords of the legendary period whom the Yellow Emperor had to overcome before he could establish order (57, ch. 1, 3a-4b). A variant story (9, vol. 1, p. 27, n. 2) tells of 21 brothers named Ch'ih-yu with the bodies of beasts and human voices, heads of copper and foreheads of iron, who ate sand, made weapons of war, and terrorized the world, massacring and killing. These were also suppressed by the Yellow Emperor, this time with the assistance of a deus ex machina. Later, when the Empire was unsettled again, the Yellow Emperor drew an image of Ch'ih-yu to terrify the people. It might be suggested that this design represents Ch'ih-yu being overcome by the Yellow Emperor in the form of a dragon; but, lacking definite proof, it seems safer to suppose that any such formidable blade as this might well be called a Ch'ih-yu knife on the basis of that part of the story which describes the brothers as makers of weapons.

The weight of this weapon together with the fact that the blade has been sharpened suggests that it was intended for actual use rather than for merely ceremonial purposes.





34.4 Blade of the type ch'i.

Socketed and pierced for hafting. Decorated with casting in relief. Heavily incrusted with malachite, some azurite; areas of unaltered metal.

Chou dynasty. Height 12 in. (.304 m.); weight 2 lb. 4 oz.

(J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3).

The blade is provided with a thin flange to fit into a slot in the haft, and three long, narrow holes through which a thong could be laced to strengthen this joint. A socket, ovoid in section, projects downward from the upper end of the blade to receive the top of the haft, and its sides are pierced with small round holes for a pin. The decoration follows the curve on the thick back of the blade; and, though heavily incrusted, some of its details remain visible. A semihuman figure in crouching position is somewhat similar to that on 34.3. The hands here are held in front of the lower part of the face of which only the corner of the mouth, a fragment of the nose, and the eye are distinguishable. The long, straight hair streams upward along the curving blade and ends in a point near the top of the socket. Above the hair is a monster with curving tail and four legs ending in clawlike feet. Its neck turns downward so that the feline head with open mouth and fangs forms the top of the socket. The edge of the blade, now much corroded, extends all the way around the outside of the curve and appears to have been ground or filed to a cutting edge.

Like 34.3, this was in all probability a weapon made for use; and the weight and provisions for substantial hafting suggest that it may have been used somewhat in the manner of a two-handed axe.

Undoubtedly this is the "circular knife" 環形刀 of Ch'u Tê-i's note, and it is doubtful that he meant this as a technical term. A blade of similar form, illustrated in 38, ch. 37, p. 9a, is called a ch'i. In that case the lower part of the blade carries two loops to receive the haft (cf. 34.6). The weapon there described is about 7 in. long, by about 4 in. wide, and weighs about $1\frac{1}{2}$ lb., somewhat over half the size of this one.

34.6 Blade of the type tao.

Socketed and looped for hafting. Decorated with casting in relief. Lightly patinated with malachite and some azurite; areas of unaltered metal. Inscription of two characters. (See cut.)

Chou dynasty. Height 11\(^3\)\(\frac{1}{6}\) in. (.297 m.); weight 2 lb. 10 oz.

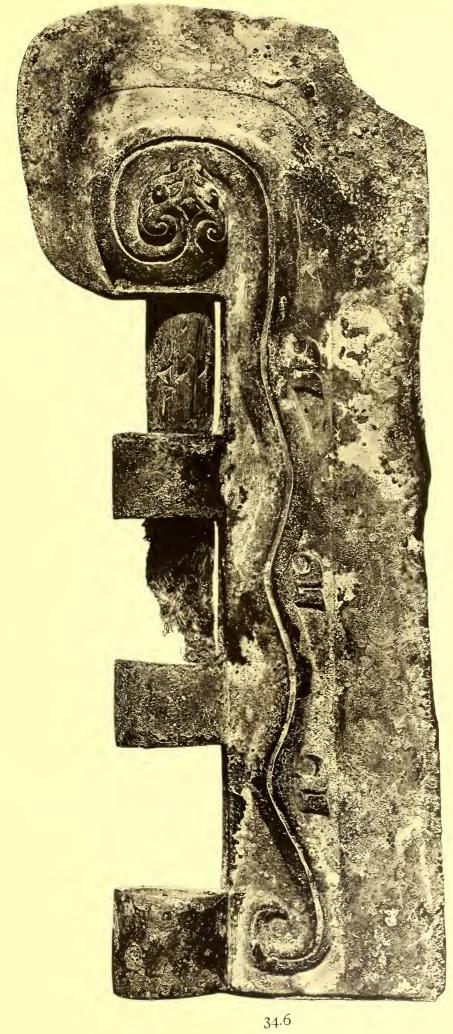
(J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3).

The cutting edge of the blade, running all the way around the outside has been somewhat damaged; one upper corner is broken off, and the long edge is bent in two different directions, apparently as a result of heavy blows against some unyielding substance. The latter must have occurred when the metal was relatively new, the former when it was old and brittle. Along the back part of the blade, in low relief, on each side is a sinuous serpentlike dragon with three hooklike projections attached to its side. Along its back is a deep groove; and the head curls around at the top so that it faces upward. Three broad loops attached to the back of the blade serve to hold a haft in place, and its upper end rests in a socket whose sides are decorated with the dragon heads. A fragment of wood, purporting to be from the original haft, remains in the socket and extends down to the second loop.



On one side of the second loop are cast the two characters k'ang hou 康 侯, Marquis K'ang. In his report (cf. 34.3), Ch'u identifies this man with K'ang Shu 康叔, a son of Wên Wang 文王 and younger brother of Wu Wang 武王, the Chou king who conquered Shang. According to the surviving records, all of which were compiled many centuries after these events, this son of Wên Wang was named Fêng 對, and was called K'ang Shu. The Duke of Chou, acting as regent for his nephew Ch'êng Wang 成 王, put K'ang Shu in charge of the former Shang territory in the east with the title, Marquis of Wei 衛 侯. The capital of this feudal state was at Chao-ko 朝歌, the site of the modern Ch'i 洪, in northern Honan, the place where this group of weapons is said to have been found (cf. 9, vol. 1, p. 246, and 35, vol. 3, pt. 2, p. 381). K'ang Shu is not referred to as K'ang Hou in the records; but in view of the fact that he was ennobled with the rank of marquis, and that the records are not only of much later date but also in very brief form, such a designation must be admitted as possible, thus placing the weapon in the reign of Ch'êng Wang. This may well be the same K'ang Hou mentioned on the kuei in the collection of Maj. Gen. Sir Neill Malcolm. The problem is discussed by Yetts (90). In that case it would be related in time to the two ceremonial vessels 30.54 and 33.2.¹³ It should be noted, however, that while the whole group of weapons was reported to have been found together, this fact would not constitute evidence that they were all made at the same time and place. There is, however, sufficient similarity in the weight, size, and general quality of 34.3, 34.4, and 34.6 to suggest that they had a common origin.

¹³ Cf. pp. 48-50.



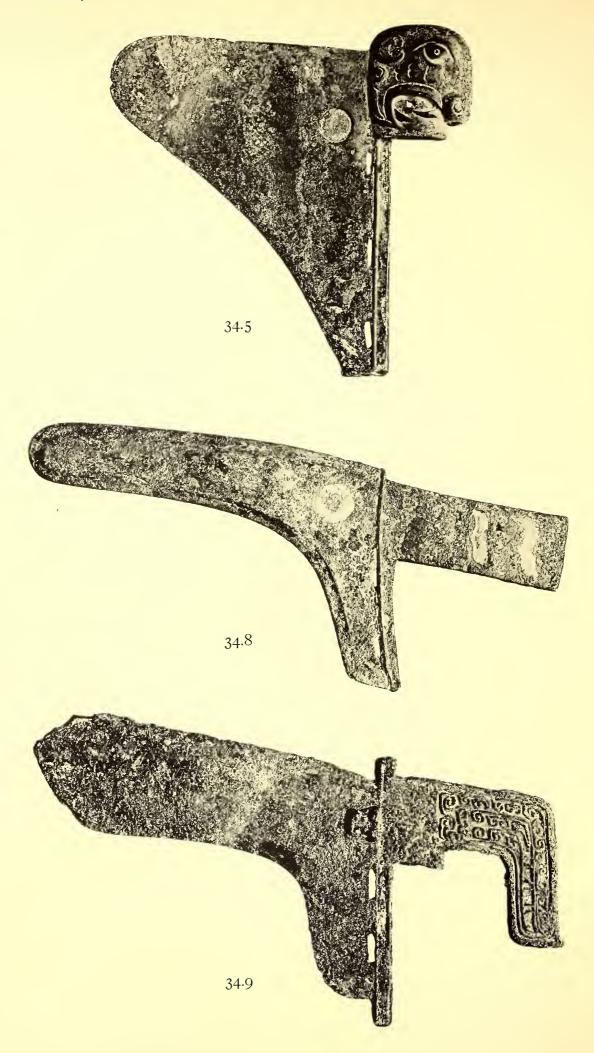


Plate 48

34.5 Blade of a weapon.

Socketed and pierced for hafting. Decorated with casting in relief on the socket. Patinated with malachite and some azurite; areas of unaltered metal.

Chou dynasty. Height 75/6 in. (.186 m.); weight 1 lb. 6 oz.

(J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3).

The blade is roughly triangular in shape with a rounded point. Along the back edge is a thin flange to be set into a grooved haft; three vertical holes are provided to receive though for strengthening this joint. Above this is a socket, ovoid in section, to hold firm the top of the haft. The socket is cast in the form of a feline head with ears, eyes, and gaping jaws with four fangs of which the upper set close inside the lower (cf. 34.3). Inside the fangs is a hole by which a pin could be driven through the top of the haft. The curious face of this animal has the ears and eyes in a normal horizontal position while the jaws open directly below them, and the nostrils have a proper relationship to the mouth but not to the eyes and ears. On the back of the blade, near the lower jaw of the beast, a flat circular depression 11/16 in. in diameter x 1/32 in. deep appears on either side. This may originally have held an inlay of some sort, either paste or a disk of semiprecious material like mother-of-pearl (cf. 34.8). If this blade is not unique in form, it is certainly rare, as no published examples resemble it in detail. Though not tanged to pierce the haft, it might be considered as a type of ko in which the curve between the yüan and the hu has not been fully formed.

34.8 Blade of the type ko.

Decorated with mother-of-pearl inlay. Patinated with malachite; areas of unaltered metal.

Chou dynasty. Length 11% in. (.293 m.); weight 1 lb. 4 oz.

(J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3).

The present example has two holes in the hu, and the cutting edge is cast with a concave bevel. On each side of the $y\ddot{u}an$ is inlaid a flat ring of mother-of-pearl, and two curving pieces of the same material are inlaid on either side of the nei.

34.9 Blade of the type ko.

Decorated with casting in relief. Incrusted with malachite and some azurite patination.

Chou dynasty. Length 11 in. (.280 m.); weight 1 lb. 3 oz.

(J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3). This ko has a broad yüan with a rather blunt point. The hu is normal with two holes; and the back end of the nei curves downward at a slightly oblique angle. Behind the part presumably covered by the haft it is decorated with raised lines in a deep intaglio field, indicating that it may have been inlaid with paste, or with bits of semiprecious stone (cf. 34.5, 34.8, 34.10). At the back of the yüan, on each side, is a small highly stylized mask cast in sharp relief. Nei of this type occur on ko found at An-yang but apparently always on those lacking the developed hu (1, pt. 3, pls. 6-8). 39.39 and 39.40 are of similar type with the inlay—in this case turquoise—intact.

34.7 Blade of the type ko.

Decorated with casting in relief. Patinated with malachite and cuprite.

Chou dynasty. Length 85% in. (.219 m.); weight 8.5 oz.

(J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3).

This ko is of usual form with a single hole in the hu. At the back of the yüan is a dragon or monster head in low relief, and its curled ovine horns rise from the surface in such a way as to embrace the haft when it is fitted over the nei, thus giving additional support. Though apparently not numerous, other examples of the kind are known (92, vol. 1, No. A.150; and 62, p. 24a-b). The Eumorfopoulos ko, like this one, has an intaglio strip with a raised ridge down the center extending along the center of the yüan itself. On the Hsün-hsien 溶 縣 piece this element is very short and is described in the text as the beast's tongue sticking out. Yetts describes his piece as having a hole through the nei in such a position that a pin may pass inside the curve of the horns, through the haft, and out the other side. He states that this pin still remains. This arrangement does not apply to the present ko as there is no hole in the nei.

The yüan has been broken off and repaired just in front of the dragon's snout, and is slightly bent near the middle. The repair is old, and the blade was undoubtedly bent before the metal was old and brittle.

34.10 Blade of the type ch'i.

Decorated with casting in relief. Cutting edge broken off, and heavily covered with rust to which fragments of wood adhere. Other parts patinated with malachite and some azurite; areas of unaltered metal.

Chou dynasty. Length 6¾ in. (.171 m.); weight 15 oz.

(A. G. W., J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3).

In the central part of this fragmentary axe head is a hole ${}^{11}\!/_{16}$ in. in diameter, and around this are cast degenerated dragon forms in intaglio with the eyes in low relief. Two narrow holes at the back probably received thongs for hafting, and a small round hole in the *nei* may have held a transverse pin to help strengthen the joint. At the back of the *nei* is a field of deep intaglio within which are raised lines in the form of a t'ao-t'ieh. Here, as in 34.9, an original inlay of some sort was probably used.

The iron cutting edge of this axe was attached to the bronze head by the mortise and tenon method. The head formed the mortise into which the tenoned blade was set, after which, presumably, they were firmly joined by either brazing or welding. If it could be determined that the group of weapons discussed here are of so early a period as that of Ch'êng Wang, as the inscription on No. 34.6 suggests, it would constitute one of the earliest known uses of iron in China.

34.11 Blade of the type ko.

Decorated with casting in relief. Point broken off, split, and heavily covered with rust. Patinated with malachite and azurite; areas of unaltered metal.

Chou dynasty. Length 73/16 in. (.183 m.); weight 13 oz.

(A. G. W., J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3).

This ko with a single thong-hole and totally lacking any hu is of the type generally considered to represent an early stage in the development of this weapon. What remains of the blade is elliptical in section and has dragon forms sharply cast in low relief on both sides. A hole 3 ₁₆ in. in diameter pierces the back end of the $y\ddot{u}an$. Thin bits of wood from an old haft adhere to one side of the nei, and at the back end of this member a small dragon is cast in relief in an intaglio field on each side. It is possible that the fossae in this design once carried an inlay material of some sort, though the raised lines are broader here and not so obviously made for that purpose as on 34.9 and 34.10.

This weapon is reinforced with an iron core, which accounts for the accumulation of rust at the broken end. This reinforcement, the added weight it gives, and the sharpened cutting edge make it apparent that this was a real weapon, and not a ceremonial one. Here again, as with No. 34.10, the question of age of this *ko* and its relation to the early use of iron in China is important as possibly suggesting an earlier use of that metal than encountered heretofore.

34.13 Blade with tubular socket for hafting.

Patinated smoothly with malachite showing traces of textile wrapping.

Chou dynasty (?). Length 51/8 in. (.129 m.); weight 10.5 oz.

(J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3).

The tubular socket has a surrounding band in relief near the top and two similar bands near the bottom. Two small concentric circles in relief appear on either side of the blade just where it joins the socket, and at the back of this member is a small, blunt vestigial tang. A small hole through both sides of the socket below the uppermost band must have received a transverse pin to fasten the haft in place.

While small axes with tubular sockets have come from China, they do not appear to belong among the indigenous bronze-age products of that country. They are rather associated with the nomadic peoples of the marginal regions to the north and west; and similar objects occur as far away as the Danube. Numerous examples have been published (92, vol. 1, Nos. A145, A151; 3, pp. 240–242, pl. 10; 4, pl. 6; 19, pl. 3; 48, pl. 2; 81, p. 26, pl. 8, 31). With the exception of those published by Martin, which were found in the Yenisei Valley in Siberia, and the Halstatt examples cited by Janse for purposes of comparison, the provenance of these objects is uncertain. Most of them were bought in North China, and belong to that group of objects loosely known as Ordos bronzes because many of them purport to come from that region north of Shensi. It should be noted, however, that even when finds of objects of this type are definitely recorded, this information is not conclusive evidence of anything in particular. The makers were members of various nomadic tribes who, through the centuries, wandered back and forth over thousands of miles of territory; and weapons or other objects might be lost or discarded at any point

in the steppe country, leaving no indication of where they were made or which particular people made them.

34.12 Small blade.

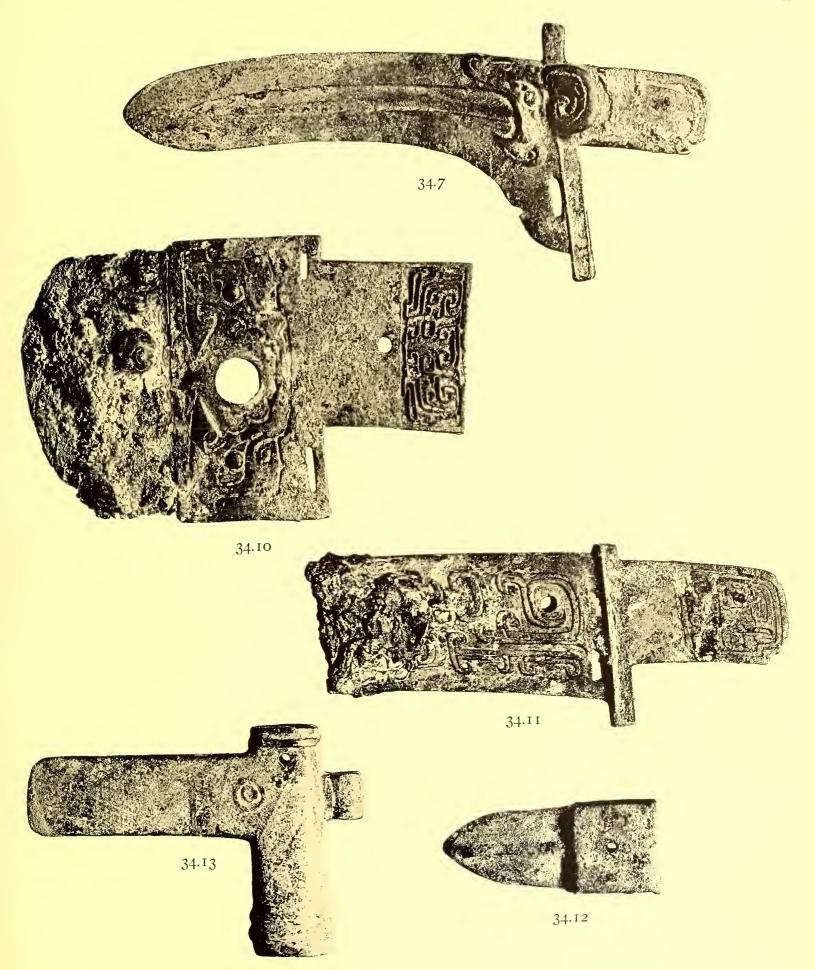
Patinated with malachite, azurite, and cuprite.

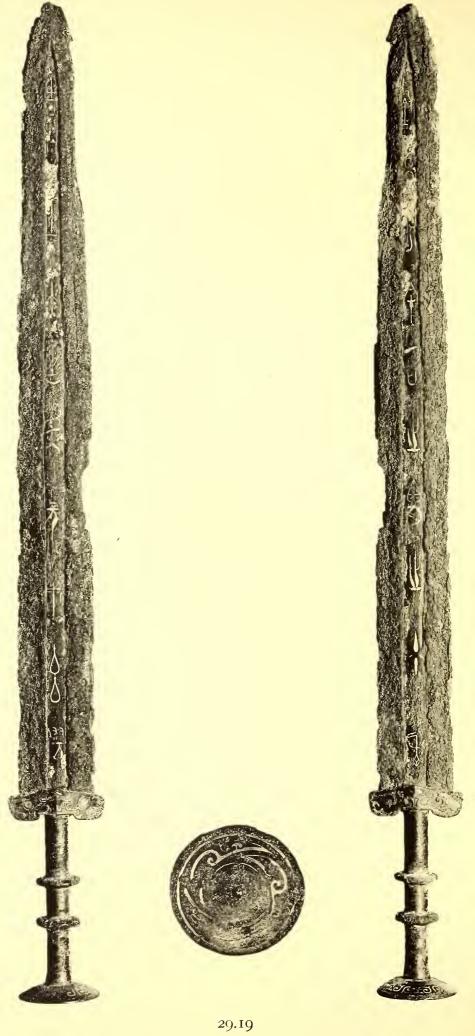
Chou dynasty (?). Length 3\% in. (.081 m.); weight 2 oz.

(J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3).

The short, pointed blade has a rounded longitudinal ridge on each side. The socket is rectangular both in outline and in section; a hole in each side probably received a transverse pin to secure the haft.

Areas near the tip are free of patination and show signs of grinding and filing. It may be that this was once a longer blade that was broken off and subsequently filed down to a fresh point. It would seem, however, that it could not have been much longer, as the size and thinness of the socket were obviously not designed to support a weapon or tool of any great size or destined for heavy work. Whatever it may have been, it is an unusual form, and nothing like it has yet been found in published repertories of bronzes. Neither the stubby blade nor the rectangular socket appears to have any relatives in the field of Chinese bronze weapons.





29.19 Sword of the type chien.

The edges foliated and heavily incrusted; areas elsewhere of light green aerugo. The pommel inlaid with a gold ornament, the guard with gold and turquoise, the center of the blade on both sides with inscriptions inlaid with gold.

Ch'in dynasty. Length $21\frac{5}{8}$ in. (.550 m.). Diameter of pommel $1\frac{5}{8}$ in. (.041 m.).

(A. G. W., 1944.) The resemblance between this sword and one found at Li-yü-ts'un 李 龄 村 has been noted several times (31, p. 29a; 32, pp. 240-241; 55, p. 70); also some account of the find is given under 32.13.

The inscription is composed of 20 characters and is inlaid on the fuller of the blade with 10 characters on either side. The inscription occurs as follows:

Obverse: 吉日壬午作為元用玄鏐. Reverse: 鋪呂朕余名之謂之少〇.

This may be rendered, "On the lucky day jên wu, made for righteous use. Pure gold covers the spine. I myself have named it calling it Little——." Kuo Mo-jo makes a good deal of difficulty over the first two characters of the reverse inscription (32, p. 241). He reads the first as po 鎮, which is possible, and the second as lü 鋁 meaning 鑪. This seems unnecessary. The first character is also readable as p'u 鋪 "to spread out" or "to cover," and the second as lü 呂 in its original Shuo wên meaning of "spine," referring, of course, to the spine of the sword which is covered by the inscription in gold.

It is worth noting that the character *chên* 朕 was a common word for the pronouns "I" and "me," but was appropriated by Ch'in Shih Huang Ti 秦始皇帝 for the royal We, Ourself. Insofar as the last character is concerned, it has been suggested that it is a form of *shih* 矢, "arrow," and certainly the lower part of it resembles a Chou dynasty arrow head.



Alloys, copper-tin, 8.	Bird, birds, 8, 37, 77, 79, 84, 85. See Red Bird.
An-yang, 1, 27, 32, 35, 60, 89, 90, 91, 95.	back to back, 31. See Owl.
Ancestors, yo ceremony in honor of, 50.	crested, long-tailed, 31.
Ancestral temple, shrine, 45, 46.	fabulous, 79.
Ang (type), 56, 57.	feet, 91.
Animal, animals, 8, 27, 60, 61, 69, 70, 74, 84.	heads, 68.
auspicious, 79. See Symbols of directions.	in cage, 84.
dancing, 79, 84.	large stylized, 65.
fabulous, <i>pi hsieh</i> , 87.	legs, 40.
faces, 34, 35.	outline, 76.
forms, stylized, 76.	pairs on Yüeh ceramics, 77.
head, 32.	symbolic, 77.
supernatural, 79.	with two human heads, 74.
symbolic, 70, 71, 76, 77. See Symbols of directions.	Blade, blades, 92, 95, 98.
vessels in shape of, 60. See Hsi tsun (type).	ch'i (type), 93, 96.
Animistic religion, 3.	Ch'ih-yu knife, 91, 92.
Annals of the Bamboo Books, Chu shu chi nien, 46, 47, 50.	circular knife, 91, 93.
Annals of the Three Sovereigns, 75.	jade ceremonial implement, 89.
Anthropomorphic head, 91, 92.	jade ceremonial ko (type), 89.
Antimony, 8.	jade ceremonial sickle, 88.
Arrow head, 65, 99.	Ko (type), 95, 96.
Art Institute of Chicago, 64.	pair of ceremonial, 90.
Associates in Fine Arts at Yale University, 65.	sword, chien (type), 99.
Axe, axes, 96.	tao (type), 91, 94.
battle-, 2. See Ch'i (type).	with iron core, ko (type), 97.
dagger-, 3, 89. See Ko (type).	with tubular socket, 97.
head, 26.	Bones:
two-handed, 93.	horse, 86.
with tubular sockets, 97.	Shang oracle, 1.
Azure (or Green) Dragon, 70, 72, 74, 76. See Symbols	tapir, 60.
of directions.	Book of Poetry, Shih ching, 37, 50.
Azurite, 27, 28, 31, 34, 37, 42, 54, 58, 66, 69, 91, 93-96,	Brazing or welding, 2, 96.
98.	Bronze:
76.	color, 8, 40, 42.
Bamboo, 32, 34.	composition of ancient, 8.
Barium, 86, 87.	divergence in quality of, 3.
Basin, 2.	Bubo bubo, 31. See Owl.
nomenclature of, 56, 57.	Buildings, 83, 84.
Battle-axe, 2. See <i>Ch'i</i> (type).	Burchard, Otto, 32.
Beaker, 3. See Ku (type).	Burnet, H. K., Collection, 29.
Beast, beasts, 76.	
bodies of, 92. See Ch'ih-yu.	Calcium, 8.
composite, 8.	Calendar, 46.
faces of, 31.	Julian, 73.
intertwined, 68.	San t'ung li, 2, 46, 47, 50.
mythical, 72. See Symbols of directions.	Shang, 2.
symbolic, 77. See Symbols of directions.	Wu Ch'i-ch'ang's, 46, 47.
tusked, 40.	Carriage, 87. See Chariot.
Beck, H. C., 86.	ornaments in Sung imperial collection, 87.
Bell, bells, 2, 64. See Chung (type).	pole support, 87.
Biot, É., 26, footnote 2.	Carts, 76, 77, 84.

^{*} Index prepared by Mrs. William Mayer, who also assisted in reading proof of the book.

	D. 1 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
Casting, 2, 8, 86, 87. See also Mirror.	Dukes of, 44-47, 94. See Duke.
cire perdu process, 2.	Palace of, 44-47. See Palace.
Ceremony, 23.	founder of, 83.
yo, 49, 50.	weapons, group of, 91-98.
Cernuschi collection, 35.	Chou Hsin (Chou; Hsin; King Chou; Shou; Shou, King
Ch'ang-sha, 65, 66.	of Shang), 83, 84.
Chao family, 57.	Chou K'ang Palace, 45. See Palace.
Chao Wang, 46, 47, 50. See Kings	Chou kung kung (Palace of the Duke or Dukes of Chou),
Chao-ko, 94.	45. See Palace.
Chariot, 86. See Carriage.	Chou li, 26, 56, 60, 70.
chock attachment, 87.	Commentary on, 56, 60.
chocks, pair of, 87.	Chu shu chi nien, Annals of the Bamboo Books, 46, 47,
fittings, 86.	50.
pole attachment, 86, 87.	Chü (type), 89.
Chekiang, 76.	Ch'u, state of, 46, 47, 65-67, 79.
Ch'ên-ch'ên group, 47-49.	poet, Ch'ü Yüan, 66.
scribe, 49.	Ch'u Tê-i, 31, 32, 53, 91-93.
Chêng Hsüan, 60.	Ch'ü Yüan, poet of state of Ch'u, 66.
Ch'êng-chou, 44, 49, 50.	Chuan Hsi, 75. See Five Emperors.
Ch'êng Lien, 70, 76, 79.	Chui (type) jar, 56.
Ch'êng Wang, 45-47, 49, 50, 91, 94, 96. See Kings.	Chung (type) bell, 2, 64.
Chi (type), 89.	
Chi, territory of, 53.	Chung Tzŭ-ch'i, 70, 76, 79.
	Chung-hang family, 57.
Ch'i, 94.	Chung-jên, 29.
Ch'i (type), 2, 93, 96.	Chung-tê, 29.
Chia (type), 2, 8, 23, 25.	Chung-tsung, 29.
Chiang Tzŭ-ya (Lü Shang or T'ai Kung Wang), 83.	Chüch (type), 2, 24.
Chief of the West, 53, 83, 84. See Hsi Po.	Cicada, 8.
Chien (sword type), 2, 99.	Cire perdu process, 2.
Chien (vessel type), 2, 56, 57.	Collections:
Chien An (reign name), 74.	Art Institute of Chicago, 64.
Ch'ien, Mr., of Hsiang-yang, collection of, 73.	British Museum, 67, footnote 9.
Ch'ien Tien, 81.	Burnet, H. K., 29.
Chih (type), 2, 36, 49.	Cernuschi, 35.
Chih, Noble, 56, 57.	Ch'ang-sha, 65.
Chih family, 57.	Ch'ien, Mr., of Hsiang-yang, 73.
Chih K'ai, 57.	Cox, John Hadley, 65.
Chih Po, 57.	Cromwell, Doris Duke, 33.
Ch'ih-yu, 92.	Eumorfopoulos, 31, 96.
knife, 91, 92.	Freer Gallery of Art, iii, 8, 31, 40, 42, 81.
Chin, state of, 57.	Kano, 36.
Chin-ts'un, 69, 86.	Lagrelius, 67, footnote 9.
Ch'in, prayer master, 47.	Malcolm, Maj. Gen. Sir Neill, 45, 94.
state of, 57.	Museum of Far Eastern Antiquities, Stockholm, 27,
Ch'in dynasty, 66.	89.
Ch'in kuei, 47.	Oeder, Rittergutsbesitzer H. G., 40.
Ch'in Shih Huang Ti, 99.	Pillsbury, Alfred F., 57.
	Sedgwick, Mrs. Walter, 85.
China tree, 87.	Sumitomo, 31, 35.
Chinaberry, 87.	Sung imperial, 87.
Chinese literature, new, 1.	Tuan Fang, 91.
Ching Kung (Palace), 44, 45, 47. See Palace.	Winthrop, Grenville, Fogg Museum of Art, 31, 32,
Chio (type), 29.	64.
Chiu (type), 40, 41.	
Chocks, pair of, 87. See Chariot.	Commentary on Chou li, 56, 60.
	Copper heads, 92. See Ch'ih-yu.
Chou, 83, 84. See Chou Hsin.	Copper-tin alloys, 8.
Chou dynasty:	Cowries, 49, 60.
beginning of, 2.	Cox, John Hadley, 65, 65, footnote 8.
bronzes:	Creature, creatures, 35, 60.
chronology of, 2.	demonlike, 76, 77.
literature on, 1.	scantily clad, 70.
calendar and chronological systems, 46.	symbolic, 70. See Symbols of directions.
capitals, 50.	wing-legged, 64.

Cromwell, Doris Duke, 33.	diaper, 27, 58.
Crown, 3-pointed, 76, 77.	double-owl, 31, 33.
Cuprite, 27, 29, 31, 34, 37, 40, 42, 58, 96, 98.	embossed dots, 84.
Cups, tripod, chio (type), 29.	fêng wên, phoenix, 55.
Cyclical character, 25, 46, 73.	geometric, 8, 72, 86, 90.
-,, -, -, -,	ground, 65-67, 70.
Dagger-axe, 3, 89. See Ko (type).	Han, elements of, 70.
Danube, 97.	interlaced, 64.
Dark Warrior (Hsüan Wu), 70-72, 74, 76, 79. See Sym-	intertwined beasts, 68
bols of directions.	knife-shaped, 91.
in form of tortoise, 76.	landscape, 69.
in form of tortoise and serpent entwined, 70.	linear, 60.
Dating of early bronzes, 1, 2.	lozenge, 8.
Decoration, 3, 27, 62, 66, 68, 70, 88, 95. See Design.	mountains and rocks, 69, 70.
mirror:	painted in red, 89.
characteristic Han, 72.	parallelograms, 70.
humans and animals, 74, 76, 79.	pebbling and scales, 60.
in landscape, 69, 70.	plant forms, 84.
	quatrefoil, 70.
inlay, 68.	
late Chou, 65, 66, 68, 69.	saw-tooth, 72.
New Dynasty type, 82.	scale, 91.
relief:	scrollwork, 72.
countersunk, 84.	semicircles and squares, 77-79.
massive, linear, and flattened, 72, 82.	spirals and triangles, 66.
pictorial, subjects of:	squared spirals, 31.
historical, 77, 82-85.	teardrop-shaped, 66.
mythological and legendary, 74, 75, 77,	thunder, 8.
82.	TLV, 72.
symbolic or fabulous animals, 70-72, 76, 77,	volute and triangle, 68.
According to the control of the cont	
79, 82, 85.	zigzag, 79.
Taoist lore, 69, 70, 74-77, 79, 82.	zoomorphic, 3.
Shang characteristic, 27.	Dog, dogs, 60, 84.
single perpendicular composition, 74.	collector of, 84. See Chou Hsin.
Yüeh type, 77-79.	Dog Jung barbarians, 84.
vessels, weapons, ornaments:	Dragon, dragons, 31, 66, 70, 76, 87, 88, 90, 94, 96, 97.
Ch'ên-ch'ên group, 48.	See Azure Dragon; Green Dragon; Yellow Dragon.
engraved, 86.	anthropomorphic head in mouth of, 91, 92.
glass eyes, 86, 87.	degenerated forms, 96.
incised, 48, 88.	head, 96.
inlay, 61, 62, 87-90, 95, 99.	head ornament, 86.
overlay, 86.	heads, 94.
Shang and early Chou, 88.	two-bodied, 42.
Deer, 8.	Drum, 35.
Demons, demonlike, 70, 76, 77.	Ducks, 58.
Design, pattern, 3, 40, 60, 70, 72, 77, 79, 82, 92. See	Duke:
also Animal; Bird; Decoration; Dragon; Owl;	Ming (Ming Pao), 44-47.
T'ao-t'ieh.	of Chou, 44-47, 94.
animals in, 8.	Tan, 45-47.
arabesques, 66.	Ting, 57, 61.
arms and claws, 35.	Tz'u, 47.
auspicious character, 84, 85.	Dukes of Chou, 44, 45.
basic, 8.	- mile of ones, 11, 10.
birds, 8.	Eastern Chin dynasty, 77.
bosses and nipples, 64, 72, 76, 77.	Eastern Country, 47.
circles, 8.	Eastern Han dynasty, 77, 82.
circular, 68.	Eastern Wu (Three Kingdoms), 82.
cloud, 72.	Elephant, 8, 51.
comb-tooth, 72, 76.	Epigraphy, ephigraphical, 1, 48, 49.
concentric circles, 97.	Eumorfopoulos collection, 31, 96.
concentric squares, 34, 35.	Excavations:
curls, feathers, and dots, 65.	An-yang, 1, 60.
degeneration of dragon, 96.	Ch'ang-sha, 65.
degeneration of owl, 31, 32	Li-yü, 58.

Excavations:—Continued	separate casting of, 2.
Noin Ula, Mongolia, 70.	upright, 62.
Shansi, 57.	Hao (Tsung-chou), 50.
	Hare, 8.
Fan family, 57.	Hatchets, fu (type), 91.
Fan Li, Minister of Yüeh, 77, 82, 85.	Hexagrams, 83.
Fang i. See I (type).	Ho Lü, Prince of Wu, 82.
	Honan Province, 42, 48, 50, 57, 86, 91, 93-97.
Fang tsun. See Tsun (type).	Hoofs, types of, 60.
Father Kuei, 49.	Horses, 83, 84, 86, 87.
Father Ting, 45, 47.	bones, 86.
Fei Chung, 83.	pits, 86.
Feline head, 64, 68, 91, 93, 95.	teams of, 76, 77.
Fêng (K'ang Shu), 94.	Hsi (type), 2, 56, 57, 60, 61.
Fêng (P'ang-ching), 50.	Hsi ch'ing ku chien, 32, 34, 60, 61.
Fêng-hsiang-fu, 53.	Hsi P'ing (Han reign name), 72, 73.
Fish, fishes, 8, 79, 84, 85.	Hsi Po (Hsi Po Ch'ang, Chief of the West), 53, 83.
Five Emperors, 74-76.	Hsi Shih, 82.
as listed in Li chi and Shih chi, 75.	Hsi tsun (type), animal vessels, 60.
Five Palaces, 76.	Hsi Wang Mu, 77, 82.
Fogg Museum of Art, Grenville Winthrop collection, 64.	Hsi-an, 50.
Former Wei dynasty (Three Kingdoms), 82.	Hsiang-yang, 73.
Freer Gallery of Art, iii, 8, 31, 40, 42, 81.	Hsiao-t'ang Shan, 70.
original collection, iii.	Hsien Hou ting, 47. See Ting (type).
Fu (type), 91.	Hsien Ti, Han Emperor, 75. See Kings, Emperors.
Fu Ch'ai, Prince of Wu, 82.	Hsien tsun, 60. See Tsun (type).
Fu Ting, Father Ting, 45, 47.	Hsin, 83. See Chou Hsin.
	house of, 83.
Gesso, 89.	Hsü (type), 58.
Glass, 86, 87.	Hsüan-wu, 70. See Dark Warrior.
Gold, 61, 68, 86, 87, 99.	Hsün-hsien, 93-98.
Golden Bell, 87.	Hu, Marquis of Ch'ung, 83, 84.
Goose, 65.	Hu slaves, 80-82.
Gotō Moriichi, 73, 77.	Huai style, 70. See Mirror.
Grandfather Ting, 47.	Huai-nan, Princes of, 65.
Green (Azure) Dragon, 76. See Symbols of directions.	Liu An, 65, 71.
Guest, Grace Dunham, iii.	Huai-nan-tzŭ, 66, 70, 80.
Suest, State Dumani, in	Huang Ti (Yellow Emperor), 75. See Five Emperors,
	Three Sovereigns.
Hache poignard, 89. See Ko (type).	Hui-hsien, 57.
Halberd, 3, 89, 91. See <i>Ko</i> (type).	Human figures, 69, 70, 74-77, 79, 84.
inlaid with shell, 91, 95.	head, 34, 40, 74, 75.
ox-head, 91.	horned face, 34.
Hall, A. R., 76.	horned head, 75.
Halstatt, 97.	voices, 92. See Ch'ih-yu.
Hamada Kōsaku, 31, 32.	Hun-yüan-chou, 59.
Han, state of, 86, 87.	Hunan Province, 65, 66.
Princes of, 69. See also Prince.	Hung Yao, 83.
tombs of, 69, 86.	Huo (type), 2, 34, 35, 42, 46-51.
Han dynasty:	1100 (type), 2, 01, 00, 12, 10 01.
Chien An (reign name), 74.	
Hsi P'ing (reign name), 72, 73.	I (type), 3, 32, 34, 37.
Hsien Ti, Emperor, 75.	fang (square), 33, 37, 42, 44, 46, 47, 50.
material from Noin Ula, 70.	phoenix, 32.
painting, 70.	I ching, 83, 84.
pottery, 70.	Implement, 88, 89.
stone reliefs and carvings, 70.	Inlay:
symbolism, 70, 71.	gold, 61, 99.
Han family, 57.	gold and silver, 68, 87.
Handle, handles, 3, 27, 28, 40, 48, 49	gold and turquoise, 99.
annular, 3, 58, 61.	gold inscription, 99.
bail, bail rings, 2, 32, 34.	mother-of-pearl, 95.
mask and ring, 62.	shell, 91.
<u> </u>	

silver, 62.	Legendary period, 74-76. See Five Emperors; Three
turquoise, 88-90, 95.	Sovereigns.
Inscription, inscriptions, 1, 60, 61, 64, 76.	New (Hsin) dynasty:
on Han mirrors:	Wang Mang, 72, 81, 82.
dates and, on TLV type, 72.	Shang dynasty:
dedicatory, 72-74.	Chou Hsin, 83, 84.
reference to animals as symbols when inscribed,	Chung-jên, 29.
70.	Chung-tsung (temple name), 29.
Yüeh type dated, 76-79.	Western Chin dynasty: T'ai K'ang (year name of Wu Ti), 80, 81.
on Han, Wu, and Chin mirrors:	Wu, King of, 77.
dedicatory, 78, 80, 85.	Yüeh, King of, 77.
discussion of Yüeh type formula phrases, 80-82. on Ch'in sword (20 characters), 99.	Knife, 91. See <i>Tao</i> (type).
on Chou vessels and weapons:	Ch'ih-yu, 91, 92.
(1-2 characters), 36, 37, 91, 94.	circular, 91, 93.
(11 or more characters), 40-50, 52, 56, 57.	Ko (type), 3, 88-91, 95, 96.
on Shang vessels (1-2 characters), 23, 25, 26, 28, 29.	development of, 89.
Iron, 96, 97.	Neolithic stone, 89.
foreheads, 92. See Ch'ih-yu.	pictorial form of, 32.
rust, 65, 96, 97.	Kou Chien, Prince of Yüeh, 82.
Isles of the Immortals, 79	Ku (type), 3, 29.
	Kuang (type), 3, 26, 27.
	Kuang-han, 72.
Jade, 88, 89, 92.	Kuei (type), 2, 3, 28, 34, 40, 41, 46, 47, 54, 58, 59, 62.
Janse, O., 70, 97.	Ch'in, 47. Ling, 46, 47.
Jar, chui (type), 56.	Malcolm, 45, 47, 94.
Ju hu yu, 53. See Yu (type).	Ming Kung, 46.
Julian calendar, 73.	Kuei, Father, 49.
Jung Kêng, 1-3, 23, 26, 35, 39, 43, 45, 47, 49, 50, 54,	Kung (Palace), 45. See Palace.
55, 57, 59, 62.	Kuo Mo-jo, 40, 41, 43, 46, 47, 49, 50, 99.
	Kuo Ting-t'ang, 49.
K'ang, Marquis (Kang Hou; K'ang Shu; Fêng), 45, 91	K'u, 75. See Five Emperors.
and footnote 12a, 94.	
K'ang ch'in, 45.	Lagrelius collection, 67, footnote 9.
K'ang Hou, 91,91 footnote 12a, 94. See K'ang, Marquis.	Lance, mou (type), 91.
-	Landscape, 69.
K'ang Kung (Palace), 44-47. See Palace.	Lead, 8.
K'ang miao, 45. K'ang Shu (K'ang-shu), 91, 94. See K'ang, Marquis.	Leather, 32.
K'ang Wang, 46. See Kings.	Legendary period, 92. rulers, 75. See Five Emperors; Three Sovereigns.
Kano collection, 36.	Legge, J., 83.
Karlbeck, Orvar, 2, 37, 65, 67, 72.	Lei (type), 3.
Karlgren, Bernard, 1, 3, 40, 43, 46, 65-66, 67, footnote	white pottery, 35.
9, 69-73, 77, 78, 80.	Li (type), 36.
King Ch'êng, 84, 91, 91, footnote 12a. See Ch'êng Wang.	Li chi, 70, 75.
King Chou, 83. See Chou Hsin.	Li Jung, country of the, 84.
King of Wu, 77.	Li-yü, Li-yü-ts'un, 58, 59, 61, 99.
King of Yüeh, 77.	Liang (Liang Shang-ch'un), 65.
King Wên, 84. See Wên Wang.	Lien, 87.
King Wu, 91 and footnote 12a. See Wu Wang.	Ling. See Nieh Ling, Annalist.
Kings, Emperors:	Ling kuei, 46, 47. See Kuei (type).
Ch'in dynasty: Ch'in Shih Huang Ti, 99.	Liu An, Prince of Huai-nan, 65, 71.
Chou dynasty:	Liu Hsin-yüan, 73. Lo chên-yü, 26, 40, 43, 49, 73, 77, 79, 81.
Chao Wang, 46, 47, 50.	Lo-yang, 42, 46, 48, 50, 65, 67.
Ch'êng Wang, 45-47, 49, 50, 91 and footnote 12a,	group, 65, 67, 70. See Mirror.
94, 96.	Lodge, John Ellerton, iii, 8, 42, 73.
K'ang Wang, 46.	Lu, Marquis of, 47.
Wên Wang, virtual founder, 50, 53, 83, 84, 94.	Lü Shang (Chiang Tzŭ-ya, T'ai Kung Wang), 83.
Wu Wang, first ruler, 45-47, 50, 91, footnote 12a.	Lü shih ch'un ch'iu, 79.
(Later) Han dynasty:	Lun hêng, 73.
Hsien Ti, 75.	Lute, 69, 70, 74, 76, 79.

Ma Hsü-lun, 43.	Ordos, 97.
Magic, magical, 69, 73. See Mirror.	Ornament:
Magnesium, 8.	carriage, 87.
Malachite, 28, 29, 31, 34, 37, 40, 42, 58, 65, 69, 89-91,	dragon head, 86.
93-98.	gold, 99.
Malcolm, Maj. Gen. Sir Neill, 45, 94.	Overlay of gold and silver, 86.
kuei, 45, 47, 94. See Kuei (type).	Owl, owls, 8, 31-33. See Design.
Mammal, 60.	back to back, 31, 33.
Mammalian head, 87.	Bubo bubo, 31.
Martin, F. R., 97.	double, 31-33.
Mask, 95. See T'ao-t'ieh.	eagle, 31.
Melia azedarach, Linn., 87.	horned, 31.
Mi-lo river, 66.	
Ming, Duke (Ming Pao), 44-47.	Palace (Kung):
Ming Kung kuei, 46. See Kuei (type).	Ching, 44, 45.
Ming Pao (Duke Ming), 44-47.	Chou K'ang, 45.
Minor Han dynasty (Three Kingdoms), 82.	Duke, Dukes, of Chou, 44.
Mirror, mirrors, 65-85. See Decoration, Design.	K'ang, 44, 45.
auspicious day for manufacture of, 73.	Mu, 45.
casting method, 66.	New (Hsin), 45.
included in Huai style objects, 70.	Shao, 45.
Lo-yang group, 65, 67, 70.	P'ang-ching (Fêng), 49, 50.
magic, magical properties, 69, 73.	Pao-chi-hsien, 53.
molds, 66, 67.	Parrot, parrots, 8, 76, 77.
pre-Han, 65, 67, 70.	beaked, 64.
Shang-fang, 72.	pairs on Yüeh ceramics, 77.
Shou-chou type, 65-67, 69, 71.	Patination, 8, 31, 42, 65.
stylistic similarity to Han carvings, 70.	Pattern. See Design.
two-piece, 68, 69.	Pelliot, Paul, 75.
Yüeh type, 76-79.	P'en (type), basin, 56, 57.
inscriptions on, 80-82.	Phoenix:
Mold, molds, 40, 66, 67.	decoration, fêng wên, 55.
impression, 26, 67.	<i>i</i> , 32. See <i>I</i> (type).
piece, 2, 58.	Pi hsieh, animal, 87.
Mongolia, 70.	Pictograph, 23.
Monster, monsters, 92, 93.	Pictorial form of ko (type), 32.
bird with two human heads, 74.	Pillsbury, Alfred F., collection, 57.
faces 32. See T'ao-t'ieh.	P'ing, Prince of Ch'u, 82. See Prince.
head, 96.	Plenderleith, H. J., 8.
winged, 75.	Po Chê-fu, 41. Po Ch'in, 47.
Moore, Benson, iii.	•
Morsell, M. Eleanor, iii.	Po ku t'u lu k'ao chêng, 31, 32. Po Ya, 70, 74, 76, 79.
Mortise-and-tenon method, 2, 96.	Pope, John A., iii.
Mother-of-pearl, 95. Mou (type), lance, 91.	Pork, 49.
	_
Mu Palace, 45. See Palace. Museum of Far Eastern Antiquities, 27, 89.	Pottery: Han, 70.
Music, 69. See Lute.	Shang, white lei, 35.
connoisseur of, 79. See Chung Tzŭ-ch'i.	Pride of India, 87.
connoissed of, 79. See Chang 124-ch i.	Prince, Princes:
	Fu Ch'ai of Wu, 82.
Neolithic stone ko, 89.	Ho Lü of Wu, 82.
New (Hsin) dynasty, 81, 82.	Kou Chien of Yüeh, 82.
New (Hsin) Emperor (Wang Mang), 81.	Liu An of Huai-nan, 65, 71.
New (Hsin) Palace, 45. See Palace.	of Han, 69.
Nieh Ling, Annalist, 44-46.	of Huai-nan, 65.
Ning shou chien ku, 31, 32.	P'ing of Ch'u, 82.
Noin Ula, Mongolia, 70.	1 mg of ch u, 62.
Nü Kua, 75. See Three Sovereigns.	Quadrigae, 83.
	Quadruped, 60, 79.
Oeder, Rittergutsbesitzer H. G., 40.	with human heads, 75.
collection, 40.	
Offering, offerings, 23, 41, 49, 60, 76.	Red Bird, 70-72, 74, 76, 79, 85. See Symbols

Red Bird, 70-72, 74, 76, 79, 85. See Symbols of directions.

Religion, animistic, 3.	Stubbs, Burns A., iii.
Rite, rites, ritual, 43-45, 47, 50.	Stylistic studies, 1.
	grounds, 49.
Sacrifice, sacrificial:	Sumitomo collection, 31, 35.
animals, 60.	Sundial, 72.
metal, 44.	Sung imperial collection, 87.
ox, 44.	Swan, 65.
victim, 44.	Sword, 2, 99. See Chien (type).
wine, 44.	Symbolism, 92.
San I-shêng, 83.	bird, 65, 77.
San t'ung li calendar, 2, 46, 47, 50.	cosmic, 70, 71.
Sedgwick, Mrs. Walter, collection, 85.	designs, 3, 84.
Seligman, C. G., 86.	fish, 79.
Semihuman figure, 93.	lunar, 92.
head with tusks, 91, 92.	Yang and Yin, 71.
Serpent, serpents, 70, 87.	Symbols of directions, 70-72, 74, 76, 77, 79, 85. See "Five
and tortoise, 70. See Dark Warrior.	Palaces."
with feline heads, 64.	Azure (or Green) Dragon, East, 70, 72, 74, 76.
	Dark Warrior (Hsüan Wu), North, 70-72, 74, 76, 79.
Serpentine body, 34, 35.	
Shan-hsi shèng chih, 53.	Red Bird, South, 70-72, 74, 76, 79, 85.
Shang dynasty:	White Tiger, West, 70, 72, 74, 76, 85.
bronzes, characteristic refinement of, 35.	Yellow Dragon, Center, 76.
calendar, 2.	m c1: 01
Chou conqueror of, 94. See Wu Wang.	Ta Chi, 83.
dates, 46.	Ta fang ting, 47. See Ting (type).
Emperor of, last, 83. See Chou Hsin.	Ta-t'ung, 59.
Kings' names, 29. See Kings.	T'ai Hao (Fu Hsi), 75. See Five Emperors; Three
oracle bones, 1.	Sovereigns.
pottery, 35.	T'ai K'ang (year name of Wu Ti, Western Chin dy-
Shang-fang mirror, 72.	nasty), 80, 81. See Kings.
Shansi Province, 57-59.	T'ai Kung Wang (Lü Shang or Chiang Tzŭ-ya), 83
Shao Hao, 75. See Five Emperors.	T'ai Shan (Mount), 79.
Shao Palace, 45. See Palace.	Takata Tadahiro, 36.
Shao-hsing region, Chekiang, 76.	Tan, Duke of Chou, 45-47. See Duke.
Shensi Province, 50, 53, 97.	T'ang dynasty commentators on Shih chi, 66.
Shih, 44.	T'ang Lan, 43.
Shih chi, 75, 83, 84.	Tao (type) knife, 3, 91, 94.
T'ang dynasty commentators on, 66.	T'ao-t'ieh, mask, 3, 32, 42, 90, 95, 96.
Shih ching, Book of Poetry, 37, 50.	shih jen yu, 35. See Yu (type).
Shou, King of Shang, 83. See Chou Hsin.	yu, 32. See Yu (type).
Shou-chou, 65, 69.	Taoist lore, 70.
Taoist philosophers at, 71.	philosophers, 71.
type, 65-67, 69, 71. See Mirror.	writings, 66.
Shu, in the West, 72.	Tapir, 60.
Shu ching, 83.	Tattooing, 91.
Shun, 75. See Five Emperors.	Textile, traces of, 65, 97. See Silk.
Shuo wên, 56, 84, 99.	Three Kingdoms (Minor Han, Former Wei, Eastern
Siberia, 97.	Wu), 82, 83.
Sickle, 88.	Three Sovereigns, 75.
Silk, mineralized, 69. See Textile.	T'ien, Mr., 80.
Silkworm, 8.	Tiger, 8, 53, 69, 70, 84. See White Tiger.
Silver, 8, 62, 68, 86, 87.	
	Tin, 8.
Six Dynasties plaque, 75.	Ting (type), 47.
"Six high dignitaries," 57.	Hsien Hou, 47.
Slaves, slavery, 80-82.	ta fang, 47.
Hu, 80-82.	Ting, Duke of Chou, 57, 61. See Duke.
Sodium, 8.	Father, 45, 47.
Sovereign, sovereigns of Heaven, Earth, and Man, 74,	Grandfather, 47.
75.	TLV mirror, 72, 82.
Sovereigns, Three, 75.	Tomb, tombs:
Sprites, 80.	Ch'ang-sha, 65.
Ssű-ma Chêng, 75.	Han, at Chin-ts'un, 69, 86.
Ssŭ-ma Ch'ien, 66.	Wu Liang Tz'ŭ, 70.

Tomioka Kenzō, 73, 74, 77, 79, 81.	White Tiger, 70, 72, 74, 76, 85. See Symbols of direc-
Tortoise, 32, 76, 79.	tions.
and serpent entwined, 70. See Dark Warrior.	Wine:
yu, 32. See Yu (type).	aromatic, 49.
Tou (type), 3, 59, 61.	sacrificial, 44.
Trigrams, 83.	Winthrop, Grenville, collection, 31, 32, 64.
Tripod, 2. See Chia and Chüeh (types).	Wood, 87, 88, 94, 96, 97.
cups, chio (type), 29.	Wu, King of, 77.
Tso chuan, 57, 61.	Wu Ch'i-ch'ang, 2, 43, 46, 47, 50.
Tsu Ting, Grandfather Ting, 47.	Wu dynasty, 77.
Tsun (type), 3, 36, 39, 42, 44, 60, 61.	Wu Liang Tz'ŭ, 70.
fang, 39.	Wu Tzŭ-hsü (Wu Yüan, the "loyal Minister"), 77, 82,
hsi, 60.	85.
hsien, 60.	Wu Wang, 45-47, 50. See Kings.
Tsung-chou (Hao), 47, 49, 50.	Wu Yüan, of Ch'u, 82. See Wu Tzŭ-hsü.
Tuan Fang collection, 91.	
Tui (type), 3, 40, 59, 62.	Yang and Yin, 71.
Tung Tso-pin, 2, 46.	Yao, 75. See Five Emperors.
Tung Wang Kung, 77, 82.	Yellow Dragon, 76. See Symbols of directions.
Turquoise, 88-90, 95, 99. See Inlay.	Yellow Emperor, Huang Ti, 74, 92. See Five Emperors;
Types of vessels, weapons, bell, 2, 3.	Three Sovereigns.
Tz'ŭ, Duke of Chou, 47. See Duke.	Yen Ti (Shên Nung), 75. See Five Emperors; Three
	Sovereigns.
II	Yenisei Valley, Siberia, 97.
Umehara Sueji, 66, 67, 69, 70, 73, 76, 77, 80, 81, 86,	Yetts, W. Percival, 2, 31, 32, 37, 41, 45, 65, 72, 76,
89, 90.	77, 81, 85, 94, 96.
	Yin, Annalist, 49.
Vase, 3. See Lei (type).	houses and people of, 26.
	<i>Yo</i> ceremony, 49, 50.
Wang Mang, Emperor of New (Hsin) dynasty, 72, 81,	Yu (type), 2, 3, 31-33, 37, 48, 49, 55-57.
82. See Kings.	double-owl, 33.
Wannieck, L., 58.	four-legged, 32.
Warring States type vessels, 57.	ju hu, 35.
Water buffalo, 8, 84.	long-necked, 33.
Watkins, W. N., 87.	t'ao-t'ieh, 32.
Weapon, weapons, 2, 3, 45, 83, 89, 91-98.	t'ao-t'ieh shih jên, 35.
makers of, 92. See Ch'ih-yu.	tortoise, 32.
Wei, Marquis of, 94.	Yü (type), 3, 52.
Wei family, 57.	Yü Shêng-wu, 43.
Wei-hui-fu, 91, 93-98.	Yu-li, 83.
Wên Wang, virtual founder of Chou dynasty, 50, 53,	Yüeh:
83, 84, 94. See Kings.	cermaic wares, 77.
Wenley, A. G., iii.	forces of, 83.
Western Chin dynasty, 77, 82.	King of, 77.
T'ai K'ang year name, 80, 81.	Kou Chien, Prince of, 82.
Western (Later) Han dynasty, 73, 82.	mirrors, 76, 77. See Mirror.
Wetmore, Alexander, 31.	
White, Bishop William C., 69, 86.	Zoomophic designs, forms, vessels, 3.
, 2.0.00	F, 1 00000, 01







